



**MWH**

**LABORATORIES**

*A Division of MWH Americas, Inc.*

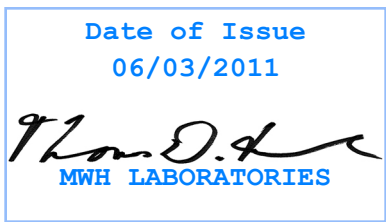
750 Royal Oak Dr., Suite 100  
Monrovia, California, 91016-3629  
Tel: 626 386 1100  
Fax: 626 386 1101  
1 800 566 LABS (1 800 566 5227)

## Laboratory Report

for

City of Phoenix  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Attention: Jesus Paez



TDF: Thomas.D.French  
Project Manager



Report#: 364587  
Project: SR85  
ADHS License# AZ0455  
Group: SR85-2011-2

Laboratory certifies that the test results meet all **NELAC** requirements unless noted in the Comments section or the Case Narrative. Following the cover page are Hits Reports, Comments, QC Summary, QC Report and Regulatory Forms. This report shall not be reproduced except in full, without the written approval of the laboratory.



**Acknowledgement of Samples Received**

**City of Phoenix**

Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810  
Attn: Jesus Paez  
Phone: (602) 534 6655

Customer Code: PHOENIX-LF

Folder #: 364587

Project: SR85

Sample Group: SR85-2011-2

Project Manager: Thomas.D.French

Phone: (480) 778-1558

The following samples were received from you on **May 12, 2011**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

Sample #	Sample ID	Sample Date
<u>201105120414</u>	85A-211 Sample Type: FO Well ID: MW-3	May 12, 2011 10:32
	@504 @VOA Mercury	
	Alkalinity in CaCO3 units Arsenic Total ICAP/MS Barium Total ICAP/MS	
	Cadmium Total ICAP/MS Chloride Chromium Total ICAP/MS	
	Copper Total ICAP/MS Fluoride Lead Total ICAP/MS	
	Nickel Total ICAP/MS Nitrate as N by RFA Low Level Selenium Total ICAP/MS	
	Silver Total ICAP/MS Total Dissolved Solid (TDS) Zinc Total ICAP/MS	
<u>201105120415</u>	85A-211 MS Sample Type: QC Well ID: MW-3	May 12, 2011 10:32
	@504 @VOA Mercury	
	Alkalinity in CaCO3 units Arsenic Total ICAP/MS Barium Total ICAP/MS	
	Cadmium Total ICAP/MS Chloride Chromium Total ICAP/MS	
	Copper Total ICAP/MS Fluoride Lead Total ICAP/MS	
	Nickel Total ICAP/MS Nitrate as N by RFA Low Level Selenium Total ICAP/MS	
	Silver Total ICAP/MS Zinc Total ICAP/MS	
<u>201105120416</u>	85A-211 MSD Sample Type: QC Well ID: MW-3	May 12, 2011 10:32
	@504 @VOA Mercury	
	Alkalinity in CaCO3 units Arsenic Total ICAP/MS Barium Total ICAP/MS	
	Cadmium Total ICAP/MS Chloride Chromium Total ICAP/MS	
	Copper Total ICAP/MS Fluoride Lead Total ICAP/MS	
	Nickel Total ICAP/MS Nitrate as N by RFA Low Level Selenium Total ICAP/MS	
	Silver Total ICAP/MS Zinc Total ICAP/MS	
<u>201105120417</u>	85A-211 DUP Sample Type: QC Well ID: MW-3	May 12, 2011 10:32
	Total Dissolved Solid (TDS)	
<u>201105120418</u>	85ATB-211 Sample Type: TB Well ID: MW-3	May 12, 2011 10:32
	@504 @VOA	
<u>201105120419</u>	85B-211 Sample Type: FO Well ID: MW-4	May 12, 2011 11:36

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 3060 South 27th Avenue  
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 Phone: (602) 534 6655

Customer Code: PHOENIX-LF  
 Folder #: 364587  
 Project: SR85  
 Sample Group: SR85-2011-2  
 Project Manager: Thomas.D.French  
 Phone: (480) 778-1558

The following samples were received from you on **May 12, 2011**. They have been scheduled for the tests listed below each sample. If this information is incorrect, please contact your service representative. Thank you for using MWH Laboratories.

Sample #	Sample ID	Sample Date																		
	<table border="1"> <tr><td>@504</td><td>@VOA</td><td>Mercury</td></tr> <tr><td>Alkalinity in CaCO3 units</td><td>Arsenic Total ICAP/MS</td><td>Barium Total ICAP/MS</td></tr> <tr><td>Cadmium Total ICAP/MS</td><td>Chloride</td><td>Chromium Total ICAP/MS</td></tr> <tr><td>Copper Total ICAP/MS</td><td>Fluoride</td><td>Lead Total ICAP/MS</td></tr> <tr><td>Nickel Total ICAP/MS</td><td>Nitrate as N by RFA Low Level</td><td>Selenium Total ICAP/MS</td></tr> <tr><td>Silver Total ICAP/MS</td><td>Total Dissolved Solid (TDS)</td><td>Zinc Total ICAP/MS</td></tr> </table>	@504	@VOA	Mercury	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS	Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS	Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS	Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS	Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS	
@504	@VOA	Mercury																		
Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS																		
Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS																		
Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS																		
Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS																		
Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS																		
<u>201105120420</u>	85F-211 Sample Type: FO Well ID: MW-1	May 12, 2011 11:45																		
	<table border="1"> <tr><td>@504</td><td>@VOA</td><td>Mercury</td></tr> <tr><td>Alkalinity in CaCO3 units</td><td>Arsenic Total ICAP/MS</td><td>Barium Total ICAP/MS</td></tr> <tr><td>Cadmium Total ICAP/MS</td><td>Chloride</td><td>Chromium Total ICAP/MS</td></tr> <tr><td>Copper Total ICAP/MS</td><td>Fluoride</td><td>Lead Total ICAP/MS</td></tr> <tr><td>Nickel Total ICAP/MS</td><td>Nitrate as N by RFA Low Level</td><td>Selenium Total ICAP/MS</td></tr> <tr><td>Silver Total ICAP/MS</td><td>Total Dissolved Solid (TDS)</td><td>Zinc Total ICAP/MS</td></tr> </table>	@504	@VOA	Mercury	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS	Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS	Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS	Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS	Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS	
@504	@VOA	Mercury																		
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Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS																		
Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS																		
<u>201105120421</u>	85E-211 Sample Type: FD Well ID: MW-1	May 12, 2011 11:44																		
	<table border="1"> <tr><td>@504</td><td>@VOA</td><td>Mercury</td></tr> <tr><td>Alkalinity in CaCO3 units</td><td>Arsenic Total ICAP/MS</td><td>Barium Total ICAP/MS</td></tr> <tr><td>Cadmium Total ICAP/MS</td><td>Chloride</td><td>Chromium Total ICAP/MS</td></tr> <tr><td>Copper Total ICAP/MS</td><td>Fluoride</td><td>Lead Total ICAP/MS</td></tr> <tr><td>Nickel Total ICAP/MS</td><td>Nitrate as N by RFA Low Level</td><td>Selenium Total ICAP/MS</td></tr> <tr><td>Silver Total ICAP/MS</td><td>Total Dissolved Solid (TDS)</td><td>Zinc Total ICAP/MS</td></tr> </table>	@504	@VOA	Mercury	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS	Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS	Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS	Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS	Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS	
@504	@VOA	Mercury																		
Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS																		
Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS																		
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Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS																		
Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS																		
<u>201105120422</u>	85D-211 Sample Type: FB Well ID: MW-2	May 12, 2011 13:29																		
	<table border="1"> <tr><td>@504</td><td>@VOA</td><td>Mercury</td></tr> <tr><td>Alkalinity in CaCO3 units</td><td>Arsenic Total ICAP/MS</td><td>Barium Total ICAP/MS</td></tr> <tr><td>Cadmium Total ICAP/MS</td><td>Chloride</td><td>Chromium Total ICAP/MS</td></tr> <tr><td>Copper Total ICAP/MS</td><td>Fluoride</td><td>Lead Total ICAP/MS</td></tr> <tr><td>Nickel Total ICAP/MS</td><td>Nitrate as N by RFA Low Level</td><td>Selenium Total ICAP/MS</td></tr> <tr><td>Silver Total ICAP/MS</td><td>Total Dissolved Solid (TDS)</td><td>Zinc Total ICAP/MS</td></tr> </table>	@504	@VOA	Mercury	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS	Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS	Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS	Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS	Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS	
@504	@VOA	Mercury																		
Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS																		
Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS																		
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Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS																		
Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS																		
<u>201105120423</u>	85DTB-211 Sample Type: TB Well ID: MW-2	May 12, 2011 13:29																		
	<table border="1"> <tr><td>@504</td><td>@VOA</td><td>3/56</td></tr> </table>	@504	@VOA	3/56																
@504	@VOA	3/56																		

### Acknowledgement of Samples Received

**City of Phoenix**

Public Works/Disposal  
 3060 South 27th Avenue  
 Phoenix, AZ 85009-6810  
 Attn: Jesus Paez  
 Phone: (602) 534 6655

Customer Code: PHOENIX-LF  
 Folder #: 364587  
 Project: SR85  
 Sample Group: SR85-2011-2  
 Project Manager: Thomas.D.French  
 Phone: (480) 778-1558

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Sample #	Sample ID	Sample Date																		
201105120424	85C-211 Sample Type: FO Well ID: MW-2	May 12, 2011 13:50																		
<table border="1"> <tr> <td>@504</td> <td>@VOA</td> <td>Mercury</td> </tr> <tr> <td>Alkalinity in CaCO3 units</td> <td>Arsenic Total ICAP/MS</td> <td>Barium Total ICAP/MS</td> </tr> <tr> <td>Cadmium Total ICAP/MS</td> <td>Chloride</td> <td>Chromium Total ICAP/MS</td> </tr> <tr> <td>Copper Total ICAP/MS</td> <td>Fluoride</td> <td>Lead Total ICAP/MS</td> </tr> <tr> <td>Nickel Total ICAP/MS</td> <td>Nitrate as N by RFA Low Level</td> <td>Selenium Total ICAP/MS</td> </tr> <tr> <td>Silver Total ICAP/MS</td> <td>Total Dissolved Solid (TDS)</td> <td>Zinc Total ICAP/MS</td> </tr> </table>			@504	@VOA	Mercury	Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS	Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS	Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS	Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS	Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS
@504	@VOA	Mercury																		
Alkalinity in CaCO3 units	Arsenic Total ICAP/MS	Barium Total ICAP/MS																		
Cadmium Total ICAP/MS	Chloride	Chromium Total ICAP/MS																		
Copper Total ICAP/MS	Fluoride	Lead Total ICAP/MS																		
Nickel Total ICAP/MS	Nitrate as N by RFA Low Level	Selenium Total ICAP/MS																		
Silver Total ICAP/MS	Total Dissolved Solid (TDS)	Zinc Total ICAP/MS																		

**Test Description**

@504 -- EPA Method 504.1

@VOA -- Volatile Organics by GCMS

@504 -- EPA Method 504.1

@VOA -- Volatile Organics by GCMS

**CHAIN OF CUSTODY RECORD**

MWH LABS USE ONLY:

750 Royal Oaks Drive, Suite 100  
Monrovia, California 91016-3629  
Tel: 626 386 1100  
Fax: 626 386 1101  
1 800 566 LABS (1 800 566 5227)

**LOGIN COMMENTS:** \_\_\_\_\_

**SAMPLES CHECKED AGAINST COC BY:** \_\_\_\_\_

**SAMPLES LOGGED IN BY:** \_\_\_\_\_

**SAMPLES REC'D DAY OF COLLECTION?**  (check for yes)

**SAMPLE TEMP RECEIVED AT:** \_\_\_\_\_

Colton / Sacramento / Scottsdale 3.2 °C (Compliance: 4 ± 2 °C )

Monrovia 2 °C (Compliance: 4 ± 2 °C )

**CONDITION OF BLUE ICE:** FROZEN  PARTIALLY FROZEN \_\_\_\_\_ THAWED \_\_\_\_\_ WET ICE \_\_\_\_\_ NO ICE \_\_\_\_\_

**METHOD OF SHIPMENT:** Pick-Up / Walk-In / FedEx / UPS / DHL / Area Fast / Top Line / Other: \_\_\_\_\_

364587

TO BE COMPLETED BY SAMPLER:		COMPLIANCE SAMPLES		NON-COMPLIANCE SAMPLES		SAMPLER COMMENTS
COMPANY/AGENCY NAME:	PROJECT CODE:	- Requires state forms	REGULATION INVOLVED:	(check for yes)		
CITY OF PHOENIX	SR-85 LF					
MWH LABS CLIENT CODE: PHOENIX-LF	COC ID:	SEE ATTACHED BOTTLE ORDER FOR ANALYSES (check for yes) OR list ANALYSES REQUIRED (enter number of bottles sent for each test for each sample)				
SAMPLER PRINTED NAME AND SIGNATURE: JESUS RAEZ	TAT requested: rush by adv notice only					
SAMPLE DATE	STD	1 wk	3 day	2 day	1 day	
SAMPLE TIME	MATRIX	Field Data	Field Data			
5/14/11 1052	85A-211	RAW	RAW	WELL ID	MW-3	
" 1136	85B-211	"	"	"	MW-4	
" 1143	85F-211	"	"	"	MW-1	
" 1144	85E-211	"	"	"	MW-1	
" 1329	85D-211	"	"	"	MW-2	
" 1350	85C-211	"	"	"	MW-2	
" 1052	85A70-211					
" 1329	85D70-211					

**\* MATRIX TYPES:** RSW = Raw Surface Water    CFW = Chlor(am)inated Finished Water    SEAW = Sea Water    BW = Bottled Water    SO = Soil    O = Other - Please Identify  
 RWG = Raw Ground Water    FW = Other Finished Water    WW = Waste Water    SW = Storm Water    SL = Sludge

RELINQUISHED BY:	SIGNATURE	PRINT NAME	COMPANY/TITLE	DATE	TIME
	<i>[Signature]</i>	JESUS RAEZ	COP	5/12/11	1450
RECEIVED BY:	<i>[Signature]</i>	JESUS RAEZ	MW14	05/12/11	1450
RELINQUISHED BY:	<i>[Signature]</i>	Steve Winkler	MW18	5-12-11	1700
RECEIVED BY:	<i>[Signature]</i>	Stefan Mofe	MW18	5-13	1450

PAGE 1 OF 1130



**MWH**

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1 800 566 LABS (1 800 566 5227)

City of Phoenix  
Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

**Laboratory Comments  
Report: #364587**

---

**Flags Legend:**

D1 - Sample required dilution due to matrix.





# MWH

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Laboratory  
Hits Report: 364587

**City of Phoenix**  
Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
<b>201105120414      85A-211</b>						
05/20/2011	13:02	Alkalinity in CaCO3 units	98		mg/L	2
05/19/2011	16:38	Arsenic Total ICAP/MS	8.0	10	ug/L	1
05/17/2011	10:55	Barium Total ICAP/MS	52	2000	ug/L	2
05/13/2011	15:45	Chloride	810	250	mg/L	25
05/27/2011	02:28	Chromium Total ICAP/MS	6.6	100	ug/L	5
05/17/2011	13:18	Fluoride	4.3	4	mg/L	0.1
05/17/2011	10:55	Nickel Total ICAP/MS	5.2		ug/L	5
05/18/2011	15:22	Nitrate as N by RFA Low Level	2.3		mg/L	0.15
05/19/2011	13:09	Total Dissolved Solids (TDS)	1600	500	mg/L	10
<b>201105120417      85A-211 DUP</b>						
05/19/2011	13:10	Total Dissolved Solids (TDS)	2100	500	mg/L	10
<b>201105120419      85B-211</b>						
05/20/2011	15:11	Alkalinity in CaCO3 units	120		mg/L	2
05/20/2011	14:16	Arsenic Total ICAP/MS	3.5	10	ug/L	1
05/17/2011	11:16	Barium Total ICAP/MS	74	2000	ug/L	2
05/13/2011	16:23	Chloride	1200	250	mg/L	50
05/27/2011	02:49	Chromium Total ICAP/MS	6.5	100	ug/L	5
05/17/2011	13:21	Fluoride	2.2	4	mg/L	0.05
05/17/2011	11:16	Nickel Total ICAP/MS	25		ug/L	5
05/18/2011	15:29	Nitrate as N by RFA Low Level	9.0		mg/L	0.15
05/17/2011	11:16	Selenium Total ICAP/MS	9.5	50	ug/L	5
05/19/2011	13:06	Total Dissolved Solids (TDS)	2700	500	mg/L	10
<b>201105120420      85F-211</b>						
05/20/2011	15:19	Alkalinity in CaCO3 units	150		mg/L	2
05/20/2011	14:25	Arsenic Total ICAP/MS	3.4	10	ug/L	1
05/17/2011	11:17	Barium Total ICAP/MS	72	2000	ug/L	2
05/13/2011	17:13	Chloride	2400	250	mg/L	50
05/25/2011	13:46	Chromium Total ICAP/MS	4.1	100	ug/L	1
05/17/2011	11:17	Copper Total ICAP/MS	5.5	1300	ug/L	2
05/17/2011	13:22	Fluoride	0.49	4	mg/L	0.05
05/20/2011	14:25	Lead Total ICAP/MS	1.4	15	ug/L	0.5
05/17/2011	11:17	Nickel Total ICAP/MS	14		ug/L	5
05/24/2011	14:58	Nitrate as N by RFA Low Level	21		mg/L	10



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Samples Received on:  
05/12/2011

Analyzed	Analyte	Sample ID	Result	Federal MCL	Units	MRL
05/19/2011	13:07	Total Dissolved Solids (TDS)	5000	500	mg/L	10
05/20/2011	14:25	Zinc Total ICAP/MS	39	5000	ug/L	20
		<b>201105120421</b>				
		<b>85E-211</b>				
05/20/2011	15:26	Alkalinity in CaCO3 units	150		mg/L	2
05/20/2011	14:29	Arsenic Total ICAP/MS	3.9	10	ug/L	1
05/17/2011	11:19	Barium Total ICAP/MS	72	2000	ug/L	2
05/13/2011	17:00	Chloride	2300	250	mg/L	50
05/25/2011	13:50	Chromium Total ICAP/MS	4.1	100	ug/L	1
05/17/2011	11:19	Copper Total ICAP/MS	3.9	1300	ug/L	2
05/17/2011	13:23	Fluoride	0.49	4	mg/L	0.05
05/20/2011	14:29	Lead Total ICAP/MS	1.4	15	ug/L	0.5
05/17/2011	11:19	Nickel Total ICAP/MS	14		ug/L	5
05/24/2011	15:00	Nitrate as N by RFA Low Level	20		mg/L	10
05/20/2011	14:29	Selenium Total ICAP/MS	13	50	ug/L	5
05/19/2011	13:04	Total Dissolved Solids (TDS)	5000	500	mg/L	10
05/20/2011	14:29	Zinc Total ICAP/MS	36	5000	ug/L	20
		<b>201105120424</b>				
		<b>85C-211</b>				
05/20/2011	15:39	Alkalinity in CaCO3 units	98		mg/L	2
05/20/2011	14:34	Arsenic Total ICAP/MS	3.5	10	ug/L	1
05/17/2011	11:22	Barium Total ICAP/MS	62	2000	ug/L	2
05/13/2011	16:35	Chloride	1600	250	mg/L	50
05/27/2011	02:53	Chromium Total ICAP/MS	5.0	100	ug/L	5
05/17/2011	11:22	Copper Total ICAP/MS	4.7	1300	ug/L	2
05/17/2011	13:25	Fluoride	2.7	4	mg/L	0.05
05/20/2011	14:34	Lead Total ICAP/MS	1.1	15	ug/L	0.5
05/17/2011	11:22	Nickel Total ICAP/MS	28		ug/L	5
05/18/2011	15:36	Nitrate as N by RFA Low Level	13		mg/L	0.15
05/20/2011	14:34	Selenium Total ICAP/MS	13	50	ug/L	5
05/19/2011	13:12	Total Dissolved Solids (TDS)	3600	500	mg/L	10





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Laboratory Data
Report: 364587

City of Phoenix
Jesus Paez
Public Works/Disposal
3060 South 27th Avenue
Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Includes sections for EPA 353.2, EPA 200.8, EPA 245.1, EPA 8011, and EPA 300.0.



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Laboratory Data  
Report: 364587

### City of Phoenix

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Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	2-Hexanone	ND	10	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Acetone	ND	10	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Acrylonitrile (Screen)	ND	50	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Benzene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Bromochloromethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Bromodichloromethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Bromoform	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Bromomethane (Methyl Bromide)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Carbon disulfide	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Carbon Tetrachloride	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Chlorobenzene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Chlorodibromomethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Chloroethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Chloroform (Trichloromethane)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Chloromethane(Methyl Chloride)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	cis-1,2-Dichloroethylene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	cis-1,3-Dichloropropene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Dibromomethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Dichloromethane	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Ethyl benzene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Iodomethane	ND	0.1	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	m,p-Xylenes	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	o-Xylene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Styrene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Tetrachloroethylene (PCE)	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Toluene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	Total xylenes	ND	1	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	trans-1,2-Dichloroethylene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	trans-1,3-Dichloropropene	ND	0.5	1
5/25/2011	05/25/2011	17:49	603249	(EPA 8260)	trans-1,4-dichloro-2-butene	ND	10	1

Rounding on totals after summation.  
(c) - indicates calculated results



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Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	17:49	603249 (EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	17:49	603249 (EPA 8260)	Trichlorofluoromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	17:49	603249 (EPA 8260)	Vinyl Acetate	ND	ug/L	10	1
5/25/2011	05/25/2011	17:49	603249 (EPA 8260)	Vinyl chloride (VC)	ND	ug/L	0.3	1
<b>SM 4500F-C - Fluoride</b>								
	05/17/2011	13:18	601122 (SM 4500F-C)	Fluoride	4.3	mg/L	0.1	2
<b>SM 2320B - Alkalinity in CaCO3 units</b>								
	05/20/2011	13:02	602131 (SM 2320B)	Alkalinity in CaCO3 units	98	mg/L	2	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>								
5/19/2011	05/19/2011	13:09	601576 (E160.1/SM2540C)	Total Dissolved Solids (TDS)	1600	mg/L	10	1
<b>85A-211 MS (201105120415)</b>						<b>Sampled on 05/12/2011 1032</b>		
Sample Type: QC								
Well Id: MW-3								
<b>EPA 353.2 - Nitrate as N by RFA Low Level</b>								
	05/18/2011	15:24	601472 (EPA 353.2)	Nitrate as N by RFA Low Level	91	%	0.15	5
<b>EPA 200.8 - ICPMS Metals</b>								
	05/19/2011	16:38	601631 (EPA 200.8)	Arsenic Total ICAP/MS	112	%	1	1
	05/17/2011	10:57	601090 (EPA 200.8)	Barium Total ICAP/MS	106	%	2	1
	05/17/2011	10:57	601090 (EPA 200.8)	Cadmium Total ICAP/MS	96	%	0.5	1
	05/27/2011	02:40	602946 (EPA 200.8)	Chromium Total ICAP/MS	95	%	5	5
	05/17/2011	10:57	601090 (EPA 200.8)	Copper Total ICAP/MS	88	%	2	1
	05/17/2011	10:57	601090 (EPA 200.8)	Lead Total ICAP/MS	107	%	0.5	1
	05/17/2011	10:57	601090 (EPA 200.8)	Nickel Total ICAP/MS	91	%	5	1
	05/17/2011	10:57	601090 (EPA 200.8)	Selenium Total ICAP/MS	119	%	5	1
	05/19/2011	15:02	601561 (EPA 200.8)	Silver Total ICAP/MS	78	%	0.5	1
	05/17/2011	10:57	601090 (EPA 200.8)	Zinc Total ICAP/MS	94	%	20	1
<b>EPA 245.1 - Mercury</b>								
5/23/2011	05/24/2011	09:28	602255 (EPA 245.1)	Mercury	103	%	0.2	1
<b>EPA 8011 - EPA Method 504.1</b>								
5/16/2011	05/16/2011	21:49	601277 (EPA 8011)	Dibromochloropropane (DBCP)	93	%	0.01	1
5/16/2011	05/16/2011	21:49	601277 (EPA 8011)	Ethylene Dibromide (EDB)	84	%	0.01	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>								
	05/13/2011	15:57	600886 (EPA 300.0)	Chloride	100	%	25	25
<b>EPA 8260 - Volatile Organics by GCMS</b>								
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	1,1,1,2-Tetrachloroethane	82	%	0.5	1

Rounding on totals after summation.  
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Laboratory Data
Report: 364587

City of Phoenix
Jesus Paez
Public Works/Disposal
3060 South 27th Avenue
Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with 10 columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Contains 40 rows of laboratory data.

Rounding on totals after summation.
(c) - indicates calculated results



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Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	o-Xylene	97	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	p-Dichlorobenzene (1,4-DCB)	97	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Styrene	75	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Tetrachloroethylene (PCE)	99	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Toluene	102	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Total xylenes	98	%	1	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	trans-1,2-Dichloroethylene	100	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	trans-1,3-Dichloropropene	82	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	trans-1,4-dichloro-2-butene	173	%	10	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Trichloroethylene (TCE)	101	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Trichlorofluoromethane	105	%	0.5	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Vinyl Acetate	74	%	10	1	
5/25/2011	05/25/2011	18:36	603249 (EPA 8260)	Vinyl chloride (VC)	110	%	0.3	1	
<b>SM 4500F-C - Fluoride</b>									
	05/17/2011	13:19	601122 (SM 4500F-C)	Fluoride	92	%	0.1	2	
<b>SM 2320B - Alkalinity in CaCO3 units</b>									
	05/20/2011	13:11	602131 (SM 2320B)	Alkalinity in CaCO3 units	101	%	2	1	
<b>85A-211 MSD (201105120416)</b>									
Sample Type: QC									
Well Id: MW-3									
<b>EPA 353.2 - Nitrate as N by RFA Low Level</b>									
	05/18/2011	15:27	601472 (EPA 353.2)	Nitrate as N by RFA Low Level	106	%	0.15	5	
<b>EPA 200.8 - ICPMS Metals</b>									
	05/19/2011	16:39	601631 (EPA 200.8)	Arsenic Total ICAP/MS	112	%	1	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Barium Total ICAP/MS	105	%	2	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Cadmium Total ICAP/MS	97	%	0.5	1	
	05/27/2011	02:44	602946 (EPA 200.8)	Chromium Total ICAP/MS	95	%	5	5	
	05/17/2011	10:59	601090 (EPA 200.8)	Copper Total ICAP/MS	88	%	2	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Lead Total ICAP/MS	108	%	0.5	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Nickel Total ICAP/MS	94	%	5	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Selenium Total ICAP/MS	129	%	5	1	
	05/19/2011	15:03	601561 (EPA 200.8)	Silver Total ICAP/MS	77	%	0.5	1	
	05/17/2011	10:59	601090 (EPA 200.8)	Zinc Total ICAP/MS	94	%	20	1	
<b>EPA 245.1 - Mercury</b>									
	5/23/2011	05/24/2011	09:31	602255 (EPA 245.1)	Mercury	103	%	0.2	1

Sampled on 05/12/2011 1032



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Laboratory Data  
Report: 364587

### City of Phoenix

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Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
<b>EPA 8011 - EPA Method 504.1</b>								
5/16/2011	05/16/2011	22:23	601277 (EPA 8011)	Dibromochloropropane (DBCP)	107	%	0.01	1
5/16/2011	05/16/2011	22:23	601277 (EPA 8011)	Ethylene Dibromide (EDB)	100	%	0.01	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>								
	05/13/2011	16:10	600886 (EPA 300.0)	Chloride	97	%	25	25
<b>EPA 8260 - Volatile Organics by GCMS</b>								
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1,1,2-Tetrachloroethane	94	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1,1-Trichloroethane	110	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1,2,2-Tetrachloroethane	96	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1,2-Trichloroethane	105	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1-Dichloroethane	109	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,1-Dichloroethylene	116	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,2,3-Trichloropropane	100	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,2-Dichloroethane	103	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	1,2-Dichloropropane	107	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	2-Butanone (MEK)	106	%	5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	2-Hexanone	111	%	10	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	4-Methyl-2-Pentanone (MIBK)	109	%	5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Acetone	102	%	10	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Acrylonitrile (Screen)	116	%	50	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Benzene	110	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Bromochloromethane	108	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Bromodichloromethane	99	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Bromoform	90	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Bromomethane (Methyl Bromide)	118	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Carbon disulfide	93	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Carbon Tetrachloride	99	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Chlorobenzene	105	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Chlorodibromomethane	100	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Chloroethane	116	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Chloroform (Trichloromethane)	106	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	Chloromethane(Methyl Chloride)	111	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	cis-1,2-Dichloroethylene	107	%	0.5	1
5/25/2011	05/25/2011	18:59	603249 (EPA 8260)	cis-1,3-Dichloropropene	102	%	0.5	1

Rounding on totals after summation.  
(c) - indicates calculated results



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Laboratory Data
Report: 364587

City of Phoenix
Jesus Paez
Public Works/Disposal
3060 South 27th Avenue
Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with 10 columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Rows include various chemical analytes like Dibromomethane, Dichloromethane, Ethyl benzene, etc.

SM 4500F-C - Fluoride

Table row for SM 4500F-C - Fluoride: 05/17/2011, 13:20, 601122, (SM 4500F-C), Fluoride, 93, %, 0.1, 2

SM 2320B - Alkalinity in CaCO3 units

Table row for SM 2320B - Alkalinity in CaCO3 units: 05/20/2011, 13:19, 602131, (SM 2320B), Alkalinity in CaCO3 units, 100, %, 2, 1

85A-211 DUP (201105120417)

Sampled on 05/12/2011 1032

Sample Type: QC
Well Id: MW-3

E160.1/SM2540C - Total Dissolved Solids (TDS)

Table row for E160.1/SM2540C - Total Dissolved Solids (TDS): 5/19/2011, 05/19/2011, 13:10, 601576, (E160.1/SM2540C), Total Dissolved Solids (TDS), 2100, mg/L, 10, 1

85ATB-211 (201105120418)

Sampled on 05/12/2011 1032

Sample Type: TB
Well Id: MW-3

EPA 8011 - EPA Method 504.1

Table rows for EPA 8011 - EPA Method 504.1: 5/16/2011, 05/16/2011, 22:57, 601277, (EPA 8011), Dibromochloropropane (DBCP), ND, ug/L, 0.01, 1; 5/16/2011, 05/16/2011, 22:57, 601277, (EPA 8011), Ethylene Dibromide (EDB), ND, ug/L, 0.01, 1





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City of Phoenix
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Public Works/Disposal
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Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with 10 columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Contains 40 rows of data for EPA 8260 - Volatile Organics by GCMS.

Rounding on totals after summation.
(c) - indicates calculated results



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City of Phoenix
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Samples Received on:
05/12/2011

Table with 10 columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Contains 18 rows of analytical data for various compounds like MTBE, DCB, Xylene, etc.

85B-211 (201105120419)

Sampled on 05/12/2011 1136

Sample Type: FO
Well Id: MW-4

EPA 353.2 - Nitrate as N by RFA Low Level

Table row for Nitrate as N by RFA Low Level: 05/18/2011 15:29 601472 (EPA 353.2) Nitrate as N by RFA Low Level 9.0 mg/L 0.15 5

EPA 200.8 - ICPMS Metals

Table with 10 columns for ICPMS Metals analysis, including Arsenic, Barium, Cadmium, Chromium, Copper, Lead, Nickel, Selenium, Silver, and Zinc.

EPA 245.1 - Mercury

Table row for Mercury: 5/23/2011 05/24/2011 09:32 602255 (EPA 245.1) Mercury ND ug/L 0.2 1

EPA 8011 - EPA Method 504.1



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Laboratory Data  
Report: 364587

### City of Phoenix

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Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/16/2011	05/16/2011	23:31	601277 (EPA 8011)	Dibromochloropropane (DBCP)	ND	ug/L	0.01	1
5/16/2011	05/16/2011	23:31	601277 (EPA 8011)	Ethylene Dibromide (EDB)	ND	ug/L	0.01	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>								
	05/13/2011	16:23	600886 (EPA 300.0)	Chloride	1200	mg/L	50	50
<b>EPA 8260 - Volatile Organics by GCMS</b>								
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1,1-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,1-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	2-Butanone (MEK)	ND	ug/L	5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	2-Hexanone	ND	ug/L	10	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Acetone	ND	ug/L	10	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Acrylonitrile (Screen)	ND	ug/L	50	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Bromochloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Bromodichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Bromoform	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Bromomethane (Methyl Bromide)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Carbon disulfide	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Carbon Tetrachloride	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Chlorobenzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Chlorodibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Chloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Chloroform (Trichloromethane)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Chloromethane(Methyl Chloride)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	cis-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	cis-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Dibromomethane	ND	ug/L	0.5	1

Rounding on totals after summation.  
(c) - indicates calculated results



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1 800 566 LABS (1 800 566 5227)

Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Dichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Ethyl benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Iodomethane	ND	ug/L	0.1	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	m,p-Xylenes	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	o-Xylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Styrene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Tetrachloroethylene (PCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Toluene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Total xylenes	ND	ug/L	1	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	trans-1,4-dichloro-2-butene	ND	ug/L	10	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Trichlorofluoromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Vinyl Acetate	ND	ug/L	10	1
5/25/2011	05/25/2011	20:54	603249 (EPA 8260)	Vinyl chloride (VC)	ND	ug/L	0.3	1
<b>SM 4500F-C - Fluoride</b>								
	05/17/2011	13:21	601122 (SM 4500F-C)	Fluoride	2.2	mg/L	0.05	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>								
	05/20/2011	15:11	602131 (SM 2320B)	Alkalinity in CaCO3 units	120	mg/L	2	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>								
5/19/2011	05/19/2011	13:06	601576 (E160.1/SM2540C)	Total Dissolved Solids (TDS)	2700	mg/L	10	1
<b>85F-211 (201105120420)</b>								
Sample Type: FO								
Well Id: MW-1								
<b>EPA 353.2 - Nitrate as N by RFA Low Level</b>								
05/24/2011	14:58	602467	(EPA 353.2)	Nitrate as N by RFA Low Level	21	mg/L	10	10
<b>EPA 200.8 - ICPMS Metals</b>								
05/20/2011	14:25	601823	(EPA 200.8)	Arsenic Total ICAP/MS	3.4 (D1)	ug/L	1	5
05/17/2011	11:17	601090	(EPA 200.8)	Barium Total ICAP/MS	72	ug/L	2	1
05/17/2011	11:17	601090	(EPA 200.8)	Cadmium Total ICAP/MS	ND	ug/L	0.5	1
05/25/2011	13:46	602393	(EPA 200.8)	Chromium Total ICAP/MS	4.1	ug/L	1	1

Sampled on 05/12/2011 1145

Rounding on totals after summation.  
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Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
	05/17/2011	11:17	601090 (EPA 200.8)	Copper Total ICAP/MS	5.5	ug/L	2	1
	05/20/2011	14:25	601823 (EPA 200.8)	Lead Total ICAP/MS	1.4 (D1)	ug/L	0.5	5
	05/17/2011	11:17	601090 (EPA 200.8)	Nickel Total ICAP/MS	14	ug/L	5	1
	05/20/2011	14:25	601823 (EPA 200.8)	Selenium Total ICAP/MS	13 (D1)	ug/L	5	5
	05/19/2011	15:23	601561 (EPA 200.8)	Silver Total ICAP/MS	ND	ug/L	0.5	1
	05/20/2011	14:25	601823 (EPA 200.8)	Zinc Total ICAP/MS	39 (D1)	ug/L	20	5
<b>EPA 245.1 - Mercury</b>								
5/23/2011	05/24/2011	09:34	602255 (EPA 245.1)	Mercury	ND	ug/L	0.2	1
<b>EPA 8011 - EPA Method 504.1</b>								
5/16/2011	05/17/2011	00:05	601277 (EPA 8011)	Dibromochloropropane (DBCP)	ND	ug/L	0.01	1
5/16/2011	05/17/2011	00:05	601277 (EPA 8011)	Ethylene Dibromide (EDB)	ND	ug/L	0.01	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>								
	05/13/2011	17:13	600886 (EPA 300.0)	Chloride	2400	mg/L	50	50
<b>EPA 8260 - Volatile Organics by GCMS</b>								
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1,1-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,1-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	2-Butanone (MEK)	ND	ug/L	5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	2-Hexanone	ND	ug/L	10	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Acetone	ND	ug/L	10	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Acrylonitrile (Screen)	ND	ug/L	50	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Bromochloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Bromodichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Bromoform	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Bromomethane (Methyl Bromide)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Carbon disulfide	ND	ug/L	0.5	1

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Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Carbon Tetrachloride	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Chlorobenzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Chlorodibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Chloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Chloroform (Trichloromethane)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Chloromethane(Methyl Chloride)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	cis-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	cis-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Dibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Dichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Ethyl benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Iodomethane	ND	ug/L	0.1	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	m,p-Xylenes	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	o-Xylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Styrene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Tetrachloroethylene (PCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Toluene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Total xylenes	ND	ug/L	1	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	trans-1,4-dichloro-2-butene	ND	ug/L	10	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Trichlorofluoromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Vinyl Acetate	ND	ug/L	10	1
5/25/2011	05/25/2011	21:17	603249 (EPA 8260)	Vinyl chloride (VC)	ND	ug/L	0.3	1
<b>SM 4500F-C - Fluoride</b>								
	05/17/2011	13:22	601122 (SM 4500F-C)	Fluoride	0.49	mg/L	0.05	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>								
	05/20/2011	15:19	602131 (SM 2320B)	Alkalinity in CaCO3 units	150	mg/L	2	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>								
5/19/2011	05/19/2011	13:07	601576 (E160.1/SM2540C)	Total Dissolved Solids (TDS)	5000	mg/L	10	1

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Laboratory Data  
Report: 364587

**City of Phoenix**  
Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution	
<b>85E-211 (201105120421)</b>						<b>Sampled on 05/12/2011 1144</b>			
Sample Type: FD Well Id: MW-1									
<b>EPA 353.2 - Nitrate as N by RFA Low Level</b>									
05/24/2011	15:00	602467	(EPA 353.2)	Nitrate as N by RFA Low Level	20	mg/L	10	10	
<b>EPA 200.8 - ICPMS Metals</b>									
05/20/2011	14:29	601823	(EPA 200.8)	Arsenic Total ICAP/MS	3.9 (D1)	ug/L	1	5	
05/17/2011	11:19	601090	(EPA 200.8)	Barium Total ICAP/MS	72	ug/L	2	1	
05/17/2011	11:19	601090	(EPA 200.8)	Cadmium Total ICAP/MS	ND	ug/L	0.5	1	
05/25/2011	13:50	602393	(EPA 200.8)	Chromium Total ICAP/MS	4.1	ug/L	1	1	
05/17/2011	11:19	601090	(EPA 200.8)	Copper Total ICAP/MS	3.9	ug/L	2	1	
05/20/2011	14:29	601823	(EPA 200.8)	Lead Total ICAP/MS	1.4 (D1)	ug/L	0.5	5	
05/17/2011	11:19	601090	(EPA 200.8)	Nickel Total ICAP/MS	14	ug/L	5	1	
05/20/2011	14:29	601823	(EPA 200.8)	Selenium Total ICAP/MS	13 (D1)	ug/L	5	5	
05/19/2011	15:24	601561	(EPA 200.8)	Silver Total ICAP/MS	ND	ug/L	0.5	1	
05/20/2011	14:29	601823	(EPA 200.8)	Zinc Total ICAP/MS	36 (D1)	ug/L	20	5	
<b>EPA 245.1 - Mercury</b>									
5/23/2011	05/24/2011	09:35	602255	(EPA 245.1)	Mercury	ND	ug/L	0.2	1
<b>EPA 8011 - EPA Method 504.1</b>									
5/16/2011	05/17/2011	00:40	601277	(EPA 8011)	Dibromochloropropane (DBCP)	ND	ug/L	0.01	1
5/16/2011	05/17/2011	00:40	601277	(EPA 8011)	Ethylene Dibromide (EDB)	ND	ug/L	0.01	1
<b>EPA 300.0 - Chloride, Sulfate by EPA 300.0</b>									
05/13/2011	17:00	600886	(EPA 300.0)	Chloride	2300	mg/L	50	50	
<b>EPA 8260 - Volatile Organics by GCMS</b>									
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1,1-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,1-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	2-Butanone (MEK)	ND	ug/L	5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	2-Hexanone	ND	ug/L	10	1

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**Laboratory Data  
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### City of Phoenix

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Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution	
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Acetone	ND	ug/L	10	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Acrylonitrile (Screen)	ND	ug/L	50	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Bromochloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Bromodichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Bromoform	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Bromomethane (Methyl Bromide)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Carbon disulfide	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Carbon Tetrachloride	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Chlorobenzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Chlorodibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Chloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Chloroform (Trichloromethane)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Chloromethane(Methyl Chloride)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	cis-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	cis-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Dibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Dichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Ethyl benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Iodomethane	ND	ug/L	0.1	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	m,p-Xylenes	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	o-Xylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Styrene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Tetrachloroethylene (PCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Toluene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Total xylenes	ND	ug/L	1	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	trans-1,4-dichloro-2-butene	ND	ug/L	10	1
5/25/2011	05/25/2011	21:41	603249	(EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1

Rounding on totals after summation.  
(c) - indicates calculated results



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1 800 566 LABS (1 800 566 5227)

Laboratory Data
Report: 364587

City of Phoenix
Jesus Paez
Public Works/Disposal
3060 South 27th Avenue
Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Contains multiple rows of analytical data for various substances like Trichlorofluoromethane, Vinyl Acetate, Fluoride, Alkalinity, TDS, Nitrate, and various metals.

Rounding on totals after summation.
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Report: 364587**

### City of Phoenix

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Public Works/Disposal  
3060 South 27th Avenue  
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Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution	
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,1-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,1-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	2-Butanone (MEK)	ND	ug/L	5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	2-Hexanone	ND	ug/L	10	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Acetone	ND	ug/L	10	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Acrylonitrile (Screen)	ND	ug/L	50	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Bromochloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Bromodichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Bromoform	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Bromomethane (Methyl Bromide)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Carbon disulfide	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Carbon Tetrachloride	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Chlorobenzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Chlorodibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Chloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Chloroform (Trichloromethane)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Chloromethane(Methyl Chloride)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	cis-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	cis-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Dibromomethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Dichloromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Ethyl benzene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Iodomethane	ND	ug/L	0.1	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	m,p-Xylenes	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249	(EPA 8260)	o-Xylene	ND	ug/L	0.5	1

Rounding on totals after summation.  
(c) - indicates calculated results



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Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Styrene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Tetrachloroethylene (PCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Toluene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Total xylenes	ND	ug/L	1	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	trans-1,4-dichloro-2-butene	ND	ug/L	10	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Trichlorofluoromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Vinyl Acetate	ND	ug/L	10	1
5/25/2011	05/25/2011	22:04	603249 (EPA 8260)	Vinyl chloride (VC)	ND	ug/L	0.3	1
<b>SM 4500F-C - Fluoride</b>								
	05/17/2011	13:24	601122 (SM 4500F-C)	Fluoride	ND	mg/L	0.05	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>								
	05/20/2011	15:31	602131 (SM 2320B)	Alkalinity in CaCO3 units	ND	mg/L	2	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>								
5/19/2011	05/19/2011	13:11	601576 (E160.1/SM2540C)	Total Dissolved Solids (TDS)	ND	mg/L	10	1
<b>85DTB-211 (201105120423)</b>								
Sample Type: TB								
Well Id: MW-2								
<b>EPA 8011 - EPA Method 504.1</b>								
5/16/2011	05/17/2011	01:48	601277 (EPA 8011)	Dibromochloropropane (DBCP)	ND	ug/L	0.01	1
5/16/2011	05/17/2011	01:48	601277 (EPA 8011)	Ethylene Dibromide (EDB)	ND	ug/L	0.01	1
<b>EPA 8260 - Volatile Organics by GCMS</b>								
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1,1,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1,1-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1,2-Trichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,1-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,2,3-Trichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:27	603249 (EPA 8260)	2-Butanone (MEK)	ND	ug/L	5	1

Sampled on 05/12/2011 1329



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Laboratory Data  
Report: 364587

City of Phoenix  
Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	2-Hexanone	ND	10	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Acetone	ND	10	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Acrylonitrile (Screen)	ND	50	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Benzene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Bromochloromethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Bromodichloromethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Bromoform	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Bromomethane (Methyl Bromide)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Carbon disulfide	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Carbon Tetrachloride	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Chlorobenzene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Chlorodibromomethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Chloroethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Chloroform (Trichloromethane)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Chloromethane(Methyl Chloride)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	cis-1,2-Dichloroethylene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	cis-1,3-Dichloropropene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Dibromomethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Dichloromethane	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Ethyl benzene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Iodomethane	ND	0.1	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	m,p-Xylenes	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	o-Xylene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Styrene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Tetrachloroethylene (PCE)	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Toluene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	Total xylenes	ND	1	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	trans-1,2-Dichloroethylene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	trans-1,3-Dichloropropene	ND	0.5	1
5/25/2011	05/25/2011	22:27	603249	(EPA 8260)	trans-1,4-dichloro-2-butene	ND	10	1

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Laboratory Data
Report: 364587

City of Phoenix
Jesus Paez
Public Works/Disposal
3060 South 27th Avenue
Phoenix, AZ 85009-6810

Samples Received on:
05/12/2011

Table with 10 columns: Prepared, Analyzed, QC Ref #, Method, Analyte, Result, Units, MRL, Dilution. Rows include Trichloroethylene (TCE), Trichlorofluoromethane, Vinyl Acetate, and Vinyl chloride (VC).

85C-211 (201105120424)

Sampled on 05/12/2011 1350

Sample Type: FO
Well Id: MW-2

EPA 353.2 - Nitrate as N by RFA Low Level

Table row for Nitrate as N by RFA Low Level: 05/18/2011, 15:36, 601472, (EPA 353.2), Nitrate as N by RFA Low Level, 13, mg/L, 0.15, 5

EPA 200.8 - ICPMS Metals

Table with 10 columns for various metals: Arsenic Total ICAP/MS, Barium Total ICAP/MS, Cadmium Total ICAP/MS, Chromium Total ICAP/MS, Copper Total ICAP/MS, Lead Total ICAP/MS, Nickel Total ICAP/MS, Selenium Total ICAP/MS, Silver Total ICAP/MS, Zinc Total ICAP/MS.

EPA 245.1 - Mercury

Table row for Mercury: 05/23/2011, 05/24/2011, 09:42, 602255, (EPA 245.1), Mercury, ND, ug/L, 0.2, 1

EPA 8011 - EPA Method 504.1

Table with 10 columns for DBCP and EDB: Dibromochloropropane (DBCP), Ethylene Dibromide (EDB).

EPA 300.0 - Chloride, Sulfate by EPA 300.0

Table row for Chloride: 05/13/2011, 16:35, 600886, (EPA 300.0), Chloride, 1600, mg/L, 50, 50

EPA 8260 - Volatile Organics by GCMS

Table with 10 columns for various volatile organics: 1,1,1,2-Tetrachloroethane, 1,1,1-Trichloroethane, 1,1,2,2-Tetrachloroethane, 1,1,2-Trichloroethane, 1,1-Dichloroethane, 1,1-Dichloroethylene, 1,2,3-Trichloropropane.

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Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	1,2-Dichloroethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	1,2-Dichloropropane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	2-Butanone (MEK)	ND	ug/L	5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	2-Hexanone	ND	ug/L	10 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	4-Methyl-2-Pentanone (MIBK)	ND	ug/L	5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Acetone	ND	ug/L	10 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Acrylonitrile (Screen)	ND	ug/L	50 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Benzene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Bromochloromethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Bromodichloromethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Bromoform	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Bromomethane (Methyl Bromide)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Carbon disulfide	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Carbon Tetrachloride	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Chlorobenzene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Chlorodibromomethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Chloroethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Chloroform (Trichloromethane)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Chloromethane(Methyl Chloride)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	cis-1,2-Dichloroethylene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	cis-1,3-Dichloropropene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Dibromomethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Dichloromethane	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Ethyl benzene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Iodomethane	ND	ug/L	0.1 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	m,p-Xylenes	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Methyl Tert-butyl ether (MTBE)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	o-Dichlorobenzene (1,2-DCB)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	o-Xylene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	p-Dichlorobenzene (1,4-DCB)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Styrene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Tetrachloroethylene (PCE)	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Toluene	ND	ug/L	0.5 1
5/25/2011	05/25/2011	22:50	603249	(EPA 8260)	Total xylenes	ND	ug/L	1 1

Rounding on totals after summation.  
(c) - indicates calculated results





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Laboratory Data  
Report: 364587

### City of Phoenix

Jesus Paez  
Public Works/Disposal  
3060 South 27th Avenue  
Phoenix, AZ 85009-6810

Samples Received on:  
05/12/2011

Prepared	Analyzed	QC Ref #	Method	Analyte	Result	Units	MRL	Dilution
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	trans-1,2-Dichloroethylene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	trans-1,3-Dichloropropene	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	trans-1,4-dichloro-2-butene	ND	ug/L	10	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	Trichloroethylene (TCE)	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	Trichlorofluoromethane	ND	ug/L	0.5	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	Vinyl Acetate	ND	ug/L	10	1
5/25/2011	05/25/2011	22:50	603249 (EPA 8260)	Vinyl chloride (VC)	ND	ug/L	0.3	1
<b>SM 4500F-C - Fluoride</b>								
	05/17/2011	13:25	601122 (SM 4500F-C)	Fluoride	2.7	mg/L	0.05	1
<b>SM 2320B - Alkalinity in CaCO3 units</b>								
	05/20/2011	15:39	602131 (SM 2320B)	Alkalinity in CaCO3 units	98	mg/L	2	1
<b>E160.1/SM2540C - Total Dissolved Solids (TDS)</b>								
5/19/2011	05/19/2011	13:12	601576 (E160.1/SM2540C)	Total Dissolved Solids (TDS)	3600	mg/L	10	1



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**Laboratory  
QC Summary: 364587**

City of Phoenix

**QC Ref # 600886 - Chloride, Sulfate by EPA 300.0**

201105120414	85A-211
201105120415	85A-211 MS
201105120416	85A-211 MSD
201105120419	85B-211
201105120420	85F-211
201105120421	85E-211
201105120422	85D-211
201105120424	85C-211

**Analysis Date: 05/13/2011**

Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX  
Analyzed by: SXX

**QC Ref # 601090 - ICPMS Metals**

201105120414	85A-211
201105120415	85A-211 MS
201105120416	85A-211 MSD
201105120419	85B-211
201105120420	85F-211
201105120421	85E-211
201105120422	85D-211
201105120424	85C-211

**Analysis Date: 05/17/2011**

Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT  
Analyzed by: VXT

**QC Ref # 601122 - Fluoride**

201105120414	85A-211
201105120415	85A-211 MS
201105120416	85A-211 MSD
201105120419	85B-211
201105120420	85F-211
201105120421	85E-211
201105120422	85D-211
201105120424	85C-211

**Analysis Date: 05/17/2011**

Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP

**QC Ref # 601277 - EPA Method 504.1**

201105120414	85A-211
201105120415	85A-211 MS
201105120416	85A-211 MSD
201105120418	85ATB-211
201105120419	85B-211
201105120420	85F-211
201105120421	85E-211
201105120422	85D-211
201105120423	85DTB-211
201105120424	85C-211

**Analysis Date: 05/16/2011**

Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM  
Analyzed by: MDM

**QC Ref # 601472 - Nitrate as N by RFA Low Level**

201105120414	85A-211
201105120415	85A-211 MS
201105120416	85A-211 MSD
201105120419	85B-211
201105120422	85D-211

**Analysis Date: 05/18/2011**

Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP  
Analyzed by: YXP



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Laboratory  
QC Summary: 364587

City of Phoenix

(continued)

201105120424 85C-211 Analyzed by: YXP

**QC Ref # 601561 - ICPMS Metals**

**Analysis Date: 05/19/2011**

201105120414	85A-211	Analyzed by: VXT
201105120415	85A-211 MS	Analyzed by: VXT
201105120416	85A-211 MSD	Analyzed by: VXT
201105120419	85B-211	Analyzed by: VXT
201105120420	85F-211	Analyzed by: VXT
201105120421	85E-211	Analyzed by: VXT
201105120422	85D-211	Analyzed by: VXT
201105120424	85C-211	Analyzed by: VXT

**QC Ref # 601576 - Total Dissolved Solids (TDS)**

**Analysis Date: 05/19/2011**

201105120414	85A-211	Analyzed by: WBH
201105120417	85A-211 DUP	Analyzed by: WBH
201105120419	85B-211	Analyzed by: WBH
201105120420	85F-211	Analyzed by: WBH
201105120421	85E-211	Analyzed by: WBH
201105120422	85D-211	Analyzed by: WBH
201105120424	85C-211	Analyzed by: WBH

**QC Ref # 601631 - ICPMS Metals**

**Analysis Date: 05/19/2011**

201105120414	85A-211	Analyzed by: VXT
201105120415	85A-211 MS	Analyzed by: VXT
201105120416	85A-211 MSD	Analyzed by: VXT

**QC Ref # 601823 - ICPMS Metals**

**Analysis Date: 05/20/2011**

201105120419	85B-211	Analyzed by: VXT
201105120420	85F-211	Analyzed by: VXT
201105120421	85E-211	Analyzed by: VXT
201105120422	85D-211	Analyzed by: VXT
201105120424	85C-211	Analyzed by: VXT

**QC Ref # 602131 - Alkalinity in CaCO3 units**

**Analysis Date: 05/20/2011**

201105120414	85A-211	Analyzed by: NJR
201105120415	85A-211 MS	Analyzed by: NJR
201105120416	85A-211 MSD	Analyzed by: NJR
201105120419	85B-211	Analyzed by: NJR
201105120420	85F-211	Analyzed by: NJR
201105120421	85E-211	Analyzed by: NJR
201105120422	85D-211	Analyzed by: NJR
201105120424	85C-211	Analyzed by: NJR

**QC Ref # 602255 - Mercury**

**Analysis Date: 05/24/2011**

201105120414	85A-211	Analyzed by: YXP
201105120415	85A-211 MS	Analyzed by: YXP
201105120416	85A-211 MSD	Analyzed by: YXP
201105120419	85B-211	Analyzed by: YXP



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City of Phoenix

(continued)

201105120420	85F-211	Analyzed by: YXP
201105120421	85E-211	Analyzed by: YXP
201105120422	85D-211	Analyzed by: YXP
201105120424	85C-211	Analyzed by: YXP

**QC Ref # 602393 - ICPMS Metals**

201105120420	85F-211	Analyzed by: DTN
201105120421	85E-211	Analyzed by: DTN

**Analysis Date: 05/25/2011**

**QC Ref # 602467 - Nitrate as N by RFA Low Level**

201105120420	85F-211	Analyzed by: YXP
201105120421	85E-211	Analyzed by: YXP

**Analysis Date: 05/24/2011**

**QC Ref # 602946 - ICPMS Metals**

201105120414	85A-211	Analyzed by: DTN
201105120415	85A-211 MS	Analyzed by: DTN
201105120416	85A-211 MSD	Analyzed by: DTN
201105120419	85B-211	Analyzed by: DTN
201105120424	85C-211	Analyzed by: DTN

**Analysis Date: 05/27/2011**

**QC Ref # 603249 - Volatile Organics by GCMS**

201105120414	85A-211	Analyzed by: MCB
201105120415	85A-211 MS	Analyzed by: MCB
201105120416	85A-211 MSD	Analyzed by: MCB
201105120418	85ATB-211	Analyzed by: MCB
201105120419	85B-211	Analyzed by: MCB
201105120420	85F-211	Analyzed by: MCB
201105120421	85E-211	Analyzed by: MCB
201105120422	85D-211	Analyzed by: MCB
201105120423	85DTB-211	Analyzed by: MCB
201105120424	85C-211	Analyzed by: MCB

**Analysis Date: 05/25/2011**



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Laboratory  
QC Report: 364587

City of Phoenix

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
<b>QC Ref# 600886 - Chloride, Sulfate by EPA 300.0 by EPA 300.0</b>					<b>Analysis Date: 05/13/2011</b>				
LCS1	Chloride		25	25.8	mg/L	103	(90-110)		
LCS2	Chloride		25	26.0	mg/L	104	(90-110)	20	0.77
MBLK	Chloride			<0.5	mg/L				
MRL_CHK	Chloride		0.5	0.434	mg/L	87	(50-150)		
MS_201105160016	Chloride	13	13	27.1	mg/L	115	(80-120)		
MS_201105160017	Chloride	13	13	27.1	mg/L	113	(80-120)		
MSD_201105160016	Chloride	13	13	26.9	mg/L	114	(80-120)	20	0.87
MSD_201105160017	Chloride	13	13	27.3	mg/L	114	(80-120)	20	0.88
<b>QC Ref# 601090 - ICPMS Metals by EPA 200.8</b>					<b>Analysis Date: 05/17/2011</b>				
LCS1	Arsenic Total ICAP/MS		20	20.2	ug/L	101	(85-115)		
LCS2	Arsenic Total ICAP/MS		20	20.4	ug/L	102	(85-115)	20	0.99
MBLK	Arsenic Total ICAP/MS			<1	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1.0	0.968	ug/L	97	(50-150)		
MS_201105120414	Arsenic Total ICAP/MS		20	32.1	ug/L	117	(70-130)		
MS2_201105120686	Arsenic Total ICAP/MS	1.8	20	25.9	ug/L	121	(70-130)		
MSD_201105120414	Arsenic Total ICAP/MS		20	33.4	ug/L	123	(70-130)	20	5.0
MSD2_201105120686	Arsenic Total ICAP/MS	1.8	20	26.0	ug/L	121	(70-130)	20	0.0
LCS1	Barium Total ICAP/MS		100	101	ug/L	101	(85-115)		
LCS2	Barium Total ICAP/MS		100	99.5	ug/L	100	(85-115)	20	1.5
MBLK	Barium Total ICAP/MS			<2	ug/L				
MRL_CHK	Barium Total ICAP/MS		2.0	2.42	ug/L	121	(50-150)		
MS_201105120414	Barium Total ICAP/MS	52	100	158	ug/L	106	(70-130)		
MS2_201105120686	Barium Total ICAP/MS	21	100	121	ug/L	101	(70-130)		
MSD_201105120414	Barium Total ICAP/MS	52	100	157	ug/L	105	(70-130)	20	0.95
MSD2_201105120686	Barium Total ICAP/MS	21	100	122	ug/L	102	(70-130)	20	0.99
LCS1	Cadmium Total ICAP/MS		20	20.3	ug/L	101	(85-115)		
LCS2	Cadmium Total ICAP/MS		20	20.3	ug/L	102	(85-115)	20	0.0
MBLK	Cadmium Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Cadmium Total ICAP/MS		0.5	0.503	ug/L	101	(50-150)		
MS_201105120414	Cadmium Total ICAP/MS	ND	20	19.3	ug/L	96	(70-130)		
MS2_201105120686	Cadmium Total ICAP/MS	ND	20	22.2	ug/L	111	(70-130)		
MSD_201105120414	Cadmium Total ICAP/MS	ND	20	19.6	ug/L	97	(70-130)	20	1.5
MSD2_201105120686	Cadmium Total ICAP/MS	ND	20	21.9	ug/L	109	(70-130)	20	1.8
LCS1	Chromium Total ICAP/MS		100	99.3	ug/L	99	(85-115)		
LCS2	Chromium Total ICAP/MS		100	101	ug/L	101	(85-115)	20	1.7

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

34/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Chromium Total ICAP/MS			<1	ug/L				
MRL_CHK	Chromium Total ICAP/MS		1.0	1.00	ug/L	100	(50-150)		
MS_201105120414	Chromium Total ICAP/MS		100	99.0	ug/L	99	(70-130)		
MS2_201105120686	Chromium Total ICAP/MS	ND	100	96.8	ug/L	97	(70-130)		
MSD_201105120414	Chromium Total ICAP/MS		100	101	ug/L	101	(70-130)	20	2.0
MSD2_201105120686	Chromium Total ICAP/MS	ND	100	98.9	ug/L	99	(70-130)	20	2.1
LCS1	Copper Total ICAP/MS		100	100	ug/L	100	(85-115)		
LCS2	Copper Total ICAP/MS		100	100	ug/L	100	(85-115)	20	0.0
MBLK	Copper Total ICAP/MS			<2	ug/L				
MRL_CHK	Copper Total ICAP/MS		2.0	1.99	ug/L	100	(50-150)		
MS_201105120414	Copper Total ICAP/MS	ND	100	88.6	ug/L	88	(70-130)		
MS2_201105120686	Copper Total ICAP/MS	2.4	100	96.5	ug/L	94	(70-130)		
MSD_201105120414	Copper Total ICAP/MS	ND	100	88.7	ug/L	88	(70-130)	20	0.11
MSD2_201105120686	Copper Total ICAP/MS	2.4	100	99.0	ug/L	97	(70-130)	20	2.6
LCS1	Lead Total ICAP/MS		20	20.0	ug/L	100	(85-115)		
LCS2	Lead Total ICAP/MS		20	20.1	ug/L	100	(85-115)	20	0.50
MBLK	Lead Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.497	ug/L	99	(50-150)		
MS_201105120414	Lead Total ICAP/MS	ND	20	21.7	ug/L	107	(70-130)		
MS2_201105120686	Lead Total ICAP/MS	ND	20	20.5	ug/L	102	(70-130)		
MSD_201105120414	Lead Total ICAP/MS	ND	20	22.0	ug/L	108	(70-130)	20	0.93
MSD2_201105120686	Lead Total ICAP/MS	ND	20	20.2	ug/L	100	(70-130)	20	2.0
LCS1	Nickel Total ICAP/MS		50	49.8	ug/L	100	(85-115)		
LCS2	Nickel Total ICAP/MS		50	51.0	ug/L	102	(85-115)	20	2.4
MBLK	Nickel Total ICAP/MS			<5	ug/L				
MRL_CHK	Nickel Total ICAP/MS		5.0	4.91	ug/L	98	(50-150)		
MS_201105120414	Nickel Total ICAP/MS	5.2	50	50.6	ug/L	91	(70-130)		
MS2_201105120686	Nickel Total ICAP/MS	ND	50	48.8	ug/L	95	(70-130)		
MSD_201105120414	Nickel Total ICAP/MS	5.2	50	52.1	ug/L	94	(70-130)	20	3.4
MSD2_201105120686	Nickel Total ICAP/MS	ND	50	49.4	ug/L	96	(70-130)	20	1.3
LCS1	Selenium Total ICAP/MS		20	19.6	ug/L	98	(85-115)		
LCS2	Selenium Total ICAP/MS		20	20.2	ug/L	101	(85-115)	20	3.0
MBLK	Selenium Total ICAP/MS			<5	ug/L				
MRL_CHK	Selenium Total ICAP/MS		5.0	5.3	ug/L	106	(50-150)		
MS_201105120414	Selenium Total ICAP/MS	ND	20	26.4	ug/L	119	(70-130)		
MS2_201105120686	Selenium Total ICAP/MS	ND	20	27.7	ug/L	<u>133</u>	(70-130)		
MSD_201105120414	Selenium Total ICAP/MS	ND	20	28.4	ug/L	129	(70-130)	20	8.1

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

35/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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1 800 566 LABS (1 800 566 5227)

Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD2_201105120686	Selenium Total ICAP/MS	ND	20	30.5	ug/L	<u>147</u>	(70-130)	20	10
MBLK	Silver Total ICAP/MS			<0.5	ug/L				
MS_201105120414	Silver Total ICAP/MS		50	40.1	ug/L	80	(70-130)		
MS2_201105120686	Silver Total ICAP/MS	ND	50	43.3	ug/L	87	(70-130)		
MSD_201105120414	Silver Total ICAP/MS		50	40.3	ug/L	81	(70-130)	20	0.37
MSD2_201105120686	Silver Total ICAP/MS	ND	50	42.6	ug/L	85	(70-130)	20	1.8
LCS1	Zinc Total ICAP/MS		100	101	ug/L	101	(85-115)		
LCS2	Zinc Total ICAP/MS		100	101	ug/L	101	(85-115)	20	0.0
MBLK	Zinc Total ICAP/MS			<20	ug/L				
MRL_CHK	Zinc Total ICAP/MS		20	19.2	ug/L	96	(50-150)		
MS_201105120414	Zinc Total ICAP/MS	ND	100	102	ug/L	94	(70-130)		
MS2_201105120686	Zinc Total ICAP/MS	ND	100	121	ug/L	115	(70-130)		
MSD_201105120414	Zinc Total ICAP/MS	ND	100	103	ug/L	94	(70-130)	20	0.85
MSD2_201105120686	Zinc Total ICAP/MS	ND	100	122	ug/L	117	(70-130)	20	1.7

### QC Ref# 601122 - Fluoride by SM 4500F-C

Analysis Date: 05/17/2011

LCS1	Fluoride		1.0	1.00	mg/L	100	(81-116)		
LCS2	Fluoride		1.0	1.00	mg/L	100	(81-116)	20	0.0
MBLK	Fluoride			<0.05	mg/L				
MRL_CHK	Fluoride		0.05	0.0510	mg/L	102	(50-150)		
MS_201105120414	Fluoride	4.3	1.0	6.18	mg/L	92	(73-124)		
MS_201105130016	Fluoride	0.22	1.0	1.19	mg/L	97	(73-124)		
MSD_201105120414	Fluoride	4.3	1.0	6.2	mg/L	93	(73-124)	20	1.2

### QC Ref# 601276 - EPA Method 504.1 by EPA 8011

Analysis Date: 05/16/2011

CCCM	1,2-Dibromo-3-chloropropane		0.25	0.253	ug/L	101	(70-130)		
MBLK	1,2-Dibromo-3-chloropropane			<0.01	ug/L				
MRL_CHK	1,2-Dibromo-3-chloropropane		0.01	0.0106	ug/L	106	(60-140)		
MS_201105090117	1,2-Dibromo-3-chloropropane	ND	0.25	0.296	ug/L	118	(65-135)		
MSD_201105090117	1,2-Dibromo-3-chloropropane	ND	0.25	0.270	ug/L	108	(65-135)	20	8.8
CCCM	1,2-Dibromoethane		0.25	0.238	ug/L	95	(70-130)		
MBLK	1,2-Dibromoethane			<0.01	ug/L				
MRL_CHK	1,2-Dibromoethane		0.01	0.0104	ug/L	104	(60-140)		
MS_201105090117	1,2-Dibromoethane	ND	0.25	0.270	ug/L	108	(65-135)		
MSD_201105090117	1,2-Dibromoethane	ND	0.25	0.248	ug/L	99	(65-135)	20	8.6
CCCM	1,2-Dibromopropane (S)			99.7	%	100	(60-140)		
MBLK	1,2-Dibromopropane (S)			116	%	116	(60-140)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

36/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)





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City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	1,2-Dibromopropane (S)			110	%	110	(60-140)		
MS_201105090117	1,2-Dibromopropane (S)			122	%	122	(60-140)		
MSD_201105090117	1,2-Dibromopropane (S)			108	%	108	(60-140)		
<b>QC Ref# 601277 - EPA Method 504.1 by EPA 8011</b>					<b>Analysis Date: 05/16/2011</b>				
CCCM	1,2-Dibromo-3-chloropropane		0.25	0.253	ug/L	101	(70-130)		
MBLK	1,2-Dibromo-3-chloropropane			<0.01	ug/L				
MRL_CHK	1,2-Dibromo-3-chloropropane		0.01	0.0106	ug/L	106	(60-140)		
MS_201105120414	1,2-Dibromo-3-chloropropane	ND	0.25	0.234	ug/L	94	(65-135)		
MSD_201105120414	1,2-Dibromo-3-chloropropane	ND	0.25	0.267	ug/L	107	(65-135)	20	14
CCCM	1,2-Dibromoethane		0.25	0.238	ug/L	95	(70-130)		
MBLK	1,2-Dibromoethane			<0.01	ug/L				
MRL_CHK	1,2-Dibromoethane		0.01	0.0104	ug/L	104	(60-140)		
MS_201105120414	1,2-Dibromoethane	ND	0.25	0.210	ug/L	84	(65-135)		
MSD_201105120414	1,2-Dibromoethane	ND	0.25	0.251	ug/L	100	(65-135)	20	18
CCCM	1,2-Dibromopropane (S)			99.7	%	100	(60-140)		
MBLK	1,2-Dibromopropane (S)			116	%	116	(60-140)		
MRL_CHK	1,2-Dibromopropane (S)			110	%	110	(60-140)		
MS_201105120414	1,2-Dibromopropane (S)			110	%	110	(60-140)		
MSD_201105120414	1,2-Dibromopropane (S)			90.9	%	91	(60-140)		
<b>QC Ref# 601472 - Nitrate as N by RFA Low Level by EPA 353.2</b>					<b>Analysis Date: 05/18/2011</b>				
LCS1	Nitrate as N by RFA Low Level		1.0	0.973	mg/L	97	(90-110)		
LCS2	Nitrate as N by RFA Low Level		1.0	1.01	mg/L	101	(90-110)	20	3.7
MBLK	Nitrate as N by RFA Low Level			<0.03	mg/L				
MRL_CHK	Nitrate as N by RFA Low Level		0.03	0.0299	mg/L	100	(50-150)		
MS_201105050417	Nitrate as N by RFA Low Level	ND	1.0	2.17	mg/L	108	(90-110)		
MS_201105120414	Nitrate as N by RFA Low Level	2.3	1.0	6.9	mg/L	91	(90-110)		
MSD_201105050417	Nitrate as N by RFA Low Level	ND	1.0	2.03	mg/L	101	(90-110)	20	6.7
MSD_201105120414	Nitrate as N by RFA Low Level	2.3	1.0	7.64	mg/L	106	(90-110)	20	15
<b>QC Ref# 601561 - ICPMS Metals by EPA 200.8</b>					<b>Analysis Date: 05/19/2011</b>				
LCS1	Silver Total ICAP/MS		25	23.5	ug/L	94	(85-115)		
LCS2	Silver Total ICAP/MS		25	23.9	ug/L	96	(85-115)	20	1.7
MBLK	Silver Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Silver Total ICAP/MS		0.5	0.495	ug/L	99	(50-150)		
MS_201105110543	Silver Total ICAP/MS	ND	50	46.7	ug/L	94	(70-130)		
MS2_201105120414	Silver Total ICAP/MS	ND	50	39.1	ug/L	78	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

37/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201105110543	Silver Total ICAP/MS	ND	50	46.7	ug/L	93	(70-130)	20	0.11
MSD2_201105120414	Silver Total ICAP/MS	ND	50	38.4	ug/L	77	(70-130)	20	1.8
<b>QC Ref# 601576 - Total Dissolved Solids (TDS) by E160.1/SM2540C</b>					<b>Analysis Date: 05/19/2011</b>				
DUP_201105120421	Total Dissolved Solid (TDS)	5000		4910	mg/L		(0-20)	20	2.6
DUP_201105130289	Total Dissolved Solid (TDS)	42		40.0	mg/L		(0-20)	20	4.9
LCS1	Total Dissolved Solid (TDS)		175	176	mg/L	101	(80-114)		
LCS2	Total Dissolved Solid (TDS)		700	718	mg/L	103	(80-114)		
MBLK	Total Dissolved Solid (TDS)			<10	mg/L				
MRL_CHK	Total Dissolved Solid (TDS)		10	11.0	mg/L	110	(50-150)		
<b>QC Ref# 601631 - ICPMS Metals by EPA 200.8</b>					<b>Analysis Date: 05/19/2011</b>				
LCS1	Arsenic Total ICAP/MS		20	19.3	ug/L	97	(85-115)		
LCS2	Arsenic Total ICAP/MS		20	19.5	ug/L	98	(85-115)	20	1.0
MBLK	Arsenic Total ICAP/MS			<1	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1.0	0.968	ug/L	97	(50-150)		
MS_201105120414	Arsenic Total ICAP/MS	8.0	20	30.5	ug/L	112	(70-130)		
MSD_201105120414	Arsenic Total ICAP/MS	8.0	20	30.4	ug/L	112	(70-130)	20	0.0
<b>QC Ref# 601823 - ICPMS Metals by EPA 200.8</b>					<b>Analysis Date: 05/20/2011</b>				
LCS1	Arsenic Total ICAP/MS		20	18.5	ug/L	93	(85-115)		
LCS2	Arsenic Total ICAP/MS		20	18.5	ug/L	93	(85-115)	20	0.0
MBLK	Arsenic Total ICAP/MS			<1	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1.0	1.08	ug/L	108	(50-150)		
MS_201105170377	Arsenic Total ICAP/MS	ND	20	23.8	ug/L	116	(70-130)		
MS2_201105180144	Arsenic Total ICAP/MS	ND	20	23.8	ug/L	118	(70-130)		
MSD_201105170377	Arsenic Total ICAP/MS	ND	20	23.6	ug/L	115	(70-130)	20	0.87
MSD2_201105180144	Arsenic Total ICAP/MS	ND	20	23.6	ug/L	117	(70-130)	20	0.85
LCS1	Barium Total ICAP/MS		100	92.1	ug/L	92	(85-115)		
LCS2	Barium Total ICAP/MS		100	91.8	ug/L	92	(85-115)	20	0.33
MBLK	Barium Total ICAP/MS			<2	ug/L				
MRL_CHK	Barium Total ICAP/MS		2.0	2.14	ug/L	107	(50-150)		
MS_201105170377	Barium Total ICAP/MS	41	100	142	ug/L	101	(70-130)		
MS2_201105180144	Barium Total ICAP/MS	47	100	144	ug/L	97	(70-130)		
MSD_201105170377	Barium Total ICAP/MS	41	100	140	ug/L	99	(70-130)	20	1.7
MSD2_201105180144	Barium Total ICAP/MS	47	100	146	ug/L	98	(70-130)	20	1.4
LCS1	Cadmium Total ICAP/MS		20	18.3	ug/L	91	(85-115)		
LCS2	Cadmium Total ICAP/MS		20	18.4	ug/L	92	(85-115)	20	0.55

Spike recovery is already corrected for native results.

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(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

38/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Cadmium Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Cadmium Total ICAP/MS		0.5	0.501	ug/L	100	(50-150)		
MS_201105170377	Cadmium Total ICAP/MS	ND	20	21.0	ug/L	104	(70-130)		
MS2_201105180144	Cadmium Total ICAP/MS	ND	20	20.9	ug/L	104	(70-130)		
MSD_201105170377	Cadmium Total ICAP/MS	ND	20	21.2	ug/L	106	(70-130)	20	1.9
MSD2_201105180144	Cadmium Total ICAP/MS	ND	20	21.0	ug/L	105	(70-130)	20	0.96
LCS1	Chromium Total ICAP/MS		100	93.2	ug/L	93	(85-115)		
LCS2	Chromium Total ICAP/MS		100	93.2	ug/L	93	(85-115)	20	0.0
MBLK	Chromium Total ICAP/MS			<1	ug/L				
MRL_CHK	Chromium Total ICAP/MS		1.0	0.983	ug/L	98	(50-150)		
MS_201105170377	Chromium Total ICAP/MS	ND	100	95.1	ug/L	95	(70-130)		
MS2_201105180144	Chromium Total ICAP/MS	ND	100	92.1	ug/L	92	(70-130)		
MSD_201105170377	Chromium Total ICAP/MS	ND	100	94.3	ug/L	94	(70-130)	20	0.85
MSD2_201105180144	Chromium Total ICAP/MS	ND	100	93.2	ug/L	93	(70-130)	20	1.2
LCS1	Copper Total ICAP/MS		100	93.7	ug/L	94	(85-115)		
LCS2	Copper Total ICAP/MS		100	92.7	ug/L	93	(85-115)	20	1.1
MBLK	Copper Total ICAP/MS			<2	ug/L				
MRL_CHK	Copper Total ICAP/MS		2.0	1.98	ug/L	99	(50-150)		
MS_201105170377	Copper Total ICAP/MS	ND	100	93.8	ug/L	94	(70-130)		
MS2_201105180144	Copper Total ICAP/MS	4.8	100	96.1	ug/L	91	(70-130)		
MSD_201105170377	Copper Total ICAP/MS	ND	100	93.4	ug/L	93	(70-130)	20	0.43
MSD2_201105180144	Copper Total ICAP/MS	4.8	100	96.5	ug/L	92	(70-130)	20	0.44
LCS1	Lead Total ICAP/MS		20	18.5	ug/L	92	(85-115)		
LCS2	Lead Total ICAP/MS		20	18.6	ug/L	93	(85-115)	20	0.54
MBLK	Lead Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.510	ug/L	102	(50-150)		
MS_201105170377	Lead Total ICAP/MS	ND	20	20.1	ug/L	100	(70-130)		
MS2_201105180144	Lead Total ICAP/MS	ND	20	20.1	ug/L	99	(70-130)		
MSD_201105170377	Lead Total ICAP/MS	ND	20	20.1	ug/L	100	(70-130)	20	0.30
MSD2_201105180144	Lead Total ICAP/MS	ND	20	19.9	ug/L	99	(70-130)	20	0.71
LCS1	Nickel Total ICAP/MS		50	46.9	ug/L	94	(85-115)		
LCS2	Nickel Total ICAP/MS		50	46.6	ug/L	93	(85-115)	20	0.64
MBLK	Nickel Total ICAP/MS			<5	ug/L				
MRL_CHK	Nickel Total ICAP/MS		5.0	4.81	ug/L	96	(50-150)		
MS_201105170377	Nickel Total ICAP/MS	ND	50	47.8	ug/L	94	(70-130)		
MS2_201105180144	Nickel Total ICAP/MS	ND	50	48.4	ug/L	94	(70-130)		
MSD_201105170377	Nickel Total ICAP/MS	ND	50	47.9	ug/L	94	(70-130)	20	0.11

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

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(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

39/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

### City of Phoenix (continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD2_201105180144	Nickel Total ICAP/MS	ND	50	47.9	ug/L	93	(70-130)	20	1.1
LCS1	Selenium Total ICAP/MS		20	17.6	ug/L	88	(85-115)		
LCS2	Selenium Total ICAP/MS		20	17.7	ug/L	88	(85-115)	20	0.57
MBLK	Selenium Total ICAP/MS			<5	ug/L				
MRL_CHK	Selenium Total ICAP/MS		5.0	4.89	ug/L	98	(50-150)		
MS_201105170377	Selenium Total ICAP/MS	ND	20	26.2	ug/L	129	(70-130)		
MS2_201105180144	Selenium Total ICAP/MS	ND	20	28.6	ug/L	<u>133</u>	(70-130)		
MSD_201105170377	Selenium Total ICAP/MS	ND	20	26.6	ug/L	<u>131</u>	(70-130)	20	1.5
MSD2_201105180144	Selenium Total ICAP/MS	ND	20	27.5	ug/L	127	(70-130)	20	4.6
MBLK	Silver Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Silver Total ICAP/MS		0.5	0.510	ug/L	102	(50-150)		
MS_201105170377	Silver Total ICAP/MS	ND	50	41.6	ug/L	83	(70-130)		
MS2_201105180144	Silver Total ICAP/MS	2.9	50	41.7	ug/L	77	(70-130)		
MSD_201105170377	Silver Total ICAP/MS	ND	50	41.4	ug/L	83	(70-130)	20	0.24
MSD2_201105180144	Silver Total ICAP/MS	2.9	50	42.5	ug/L	79	(70-130)	20	2.2
LCS1	Zinc Total ICAP/MS		100	91.8	ug/L	92	(85-115)		
LCS2	Zinc Total ICAP/MS		100	90.9	ug/L	91	(85-115)	20	0.99
MBLK	Zinc Total ICAP/MS			<20	ug/L				
MRL_CHK	Zinc Total ICAP/MS		20	18.9	ug/L	95	(50-150)		
MS_201105170377	Zinc Total ICAP/MS	ND	100	112	ug/L	111	(70-130)		
MS2_201105180144	Zinc Total ICAP/MS	320	100	425	ug/L	105	(70-130)		
MSD_201105170377	Zinc Total ICAP/MS	ND	100	113	ug/L	112	(70-130)	20	0.90
MSD2_201105180144	Zinc Total ICAP/MS	320	100	429	ug/L	110	(70-130)	20	4.7

### QC Ref# 602131 - Alkalinity in CaCO3 units by SM 2320B

Analysis Date: 05/20/2011

LCS1	Alkalinity in CaCO3 units		100	100	mg/L	100	(90-110)		
LCS2	Alkalinity in CaCO3 units		100	101	mg/L	101	(90-110)	20	1
MBLK	Alkalinity in CaCO3 units			<2	mg/L				
MRL_CHK	Alkalinity in CaCO3 units		2.0	1.91	mg/L	96	(50-150)		
MS_201105120414	Alkalinity in CaCO3 units	98	100	199	mg/L	101	(80-120)		
MS2_201105130305	Alkalinity in CaCO3 units	64	100	164	mg/L	100	(80-120)		
MSD_201105120414	Alkalinity in CaCO3 units	98	100	197	mg/L	100	(80-120)	20	1.3
MSD2_201105130305	Alkalinity in CaCO3 units	64	100	163	mg/L	100	(80-120)	20	0.30

### QC Ref# 602255 - Mercury by EPA 245.1

Analysis Date: 05/24/2011

LCS1	Mercury		1.5	1.5	ug/L	100	(85-115)		
LCS2	Mercury		1.5	1.5	ug/L	100	(85-115)	20	0.0

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

40/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Mercury			<0.2	ug/L				
MRL_CHK	Mercury		0.2	0.218	ug/L	109	(50-150)		
MS_201105120221	Mercury	ND	1.5	1.54	ug/L	102	(70-130)		
MS_201105120414	Mercury	ND	1.5	1.56	ug/L	103	(70-130)		
MSD_201105120221	Mercury	ND	1.5	1.53	ug/L	102	(70-130)	20	0.0
MSD_201105120414	Mercury	ND	1.5	1.56	ug/L	103	(70-130)	20	0.0
<b>QC Ref# 602393 - ICPMS Metals by EPA 200.8</b>					<b>Analysis Date: 05/25/2011</b>				
LCS1	Arsenic Total ICAP/MS		20	19.6	ug/L	98	(85-115)		
LCS2	Arsenic Total ICAP/MS		20	19.7	ug/L	99	(85-115)	20	0.51
MBLK	Arsenic Total ICAP/MS			<1	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1.0	1.06	ug/L	106	(50-150)		
MS_201105120207	Arsenic Total ICAP/MS	ND	20	21.6	ug/L	103	(70-130)		
MS2_201105120414	Arsenic Total ICAP/MS		20	20.7	ug/L	103	(70-130)		
MSD_201105120207	Arsenic Total ICAP/MS	ND	20	21.6	ug/L	104	(70-130)	20	0.97
MSD2_201105120414	Arsenic Total ICAP/MS		20	19.4	ug/L	97	(70-130)	20	5.8
LCS1	Barium Total ICAP/MS		100	99.3	ug/L	99	(85-115)		
LCS2	Barium Total ICAP/MS		100	98.6	ug/L	99	(85-115)	20	0.71
MBLK	Barium Total ICAP/MS			<2	ug/L				
MRL_CHK	Barium Total ICAP/MS		2.0	2.11	ug/L	106	(50-150)		
MS_201105120207	Barium Total ICAP/MS	160	100	271	ug/L	107	(70-130)		
MS2_201105120414	Barium Total ICAP/MS		100	107	ug/L	107	(70-130)		
MSD_201105120207	Barium Total ICAP/MS	160	100	270	ug/L	107	(70-130)	20	0.0
MSD2_201105120414	Barium Total ICAP/MS		100	99.2	ug/L	99	(70-130)	20	7.6
LCS1	Cadmium Total ICAP/MS		20	20.1	ug/L	100	(85-115)		
LCS2	Cadmium Total ICAP/MS		20	20.1	ug/L	100	(85-115)	20	0.0
MBLK	Cadmium Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Cadmium Total ICAP/MS		0.5	0.510	ug/L	102	(50-150)		
MS_201105120207	Cadmium Total ICAP/MS	ND	20	20.0	ug/L	100	(70-130)		
MS2_201105120414	Cadmium Total ICAP/MS		20	20.5	ug/L	102	(70-130)		
MSD_201105120207	Cadmium Total ICAP/MS	ND	20	20.2	ug/L	101	(70-130)	20	1
MSD2_201105120414	Cadmium Total ICAP/MS		20	19.4	ug/L	97	(70-130)	20	5.0
LCS1	Chromium Total ICAP/MS		100	98.8	ug/L	99	(85-115)		
LCS2	Chromium Total ICAP/MS		100	99.4	ug/L	99	(85-115)	20	0.61
MBLK	Chromium Total ICAP/MS			<1	ug/L				
MRL_CHK	Chromium Total ICAP/MS		1.0	1.1	ug/L	110	(50-150)		
MS_201105120207	Chromium Total ICAP/MS	4.0	100	102	ug/L	98	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

41/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS2_201105120414	Chromium Total ICAP/MS		100	106	ug/L	96	(70-130)		
MSD_201105120207	Chromium Total ICAP/MS	4.0	100	103	ug/L	99	(70-130)	20	0.71
MSD2_201105120414	Chromium Total ICAP/MS		100	102	ug/L	93	(70-130)	20	4.0
LCS1	Copper Total ICAP/MS		100	97.6	ug/L	98	(85-115)		
LCS2	Copper Total ICAP/MS		100	98.2	ug/L	98	(85-115)	20	0.61
MBLK	Copper Total ICAP/MS			<2	ug/L				
MRL_CHK	Copper Total ICAP/MS		2.0	2.14	ug/L	107	(50-150)		
MS_201105120207	Copper Total ICAP/MS	ND	100	91.6	ug/L	91	(70-130)		
MS2_201105120414	Copper Total ICAP/MS		100	91.0	ug/L	91	(70-130)		
MSD_201105120207	Copper Total ICAP/MS	ND	100	91.2	ug/L	91	(70-130)	20	0.55
MSD2_201105120414	Copper Total ICAP/MS		100	88.0	ug/L	88	(70-130)	20	3.4
LCS1	Lead Total ICAP/MS		20	20.1	ug/L	100	(85-115)		
LCS2	Lead Total ICAP/MS		20	19.9	ug/L	99	(85-115)	20	1.0
MBLK	Lead Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.540	ug/L	108	(50-150)		
MS_201105120207	Lead Total ICAP/MS	ND	20	19.5	ug/L	97	(70-130)		
MS2_201105120414	Lead Total ICAP/MS		20	20.1	ug/L	100	(70-130)		
MSD_201105120207	Lead Total ICAP/MS	ND	20	19.6	ug/L	98	(70-130)	20	0.51
MSD2_201105120414	Lead Total ICAP/MS		20	19.1	ug/L	95	(70-130)	20	4.8
LCS1	Nickel Total ICAP/MS		50	48.6	ug/L	97	(85-115)		
LCS2	Nickel Total ICAP/MS		50	48.8	ug/L	98	(85-115)	20	0.41
MBLK	Nickel Total ICAP/MS			<5	ug/L				
MRL_CHK	Nickel Total ICAP/MS		5.0	5.2	ug/L	104	(50-150)		
MS_201105120207	Nickel Total ICAP/MS	ND	50	46.4	ug/L	90	(70-130)		
MS2_201105120414	Nickel Total ICAP/MS		50	49.3	ug/L	99	(70-130)		
MSD_201105120207	Nickel Total ICAP/MS	ND	50	46.2	ug/L	90	(70-130)	20	0.33
MSD2_201105120414	Nickel Total ICAP/MS		50	47.6	ug/L	95	(70-130)	20	3.6
LCS1	Selenium Total ICAP/MS		20	19.6	ug/L	98	(85-115)		
LCS2	Selenium Total ICAP/MS		20	19.5	ug/L	97	(85-115)	20	0.51
MBLK	Selenium Total ICAP/MS			<5	ug/L				
MRL_CHK	Selenium Total ICAP/MS		5.0	5.26	ug/L	105	(50-150)		
MS_201105120207	Selenium Total ICAP/MS	ND	20	21.9	ug/L	105	(70-130)		
MS2_201105120414	Selenium Total ICAP/MS		20	22.0	ug/L	110	(70-130)		
MSD_201105120207	Selenium Total ICAP/MS	ND	20	22.4	ug/L	108	(70-130)	20	2.8
MSD2_201105120414	Selenium Total ICAP/MS		20	21.3	ug/L	106	(70-130)	20	3.7
MBLK	Silver Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Silver Total ICAP/MS		0.5	0.510	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

42/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS_201105120207	Silver Total ICAP/MS	ND	50	43.9	ug/L	88	(70-130)		
MS2_201105120414	Silver Total ICAP/MS		50	47.5	ug/L	95	(70-130)		
MSD_201105120207	Silver Total ICAP/MS	ND	50	46.0	ug/L	92	(70-130)	20	4.6
MSD2_201105120414	Silver Total ICAP/MS		50	44.9	ug/L	90	(70-130)	20	5.4
LCS1	Zinc Total ICAP/MS		100	97.2	ug/L	97	(85-115)		
LCS2	Zinc Total ICAP/MS		100	97.6	ug/L	98	(85-115)	20	0.41
MBLK	Zinc Total ICAP/MS			<20	ug/L				
MRL_CHK	Zinc Total ICAP/MS		20	21.0	ug/L	105	(50-150)		
MS_201105120207	Zinc Total ICAP/MS	ND	100	100	ug/L	95	(70-130)		
MS2_201105120414	Zinc Total ICAP/MS		100	102	ug/L	102	(70-130)		
MSD_201105120207	Zinc Total ICAP/MS	ND	100	99.7	ug/L	94	(70-130)	20	0.64
MSD2_201105120414	Zinc Total ICAP/MS		100	99.0	ug/L	99	(70-130)	20	3.0

### QC Ref# 602467 - Nitrate as N by RFA Low Level by EPA 353.2

Analysis Date: 05/24/2011

LCS1	Nitrate as N by RFA Low Level		1.0	1.02	mg/L	102	(90-110)		
LCS2	Nitrate as N by RFA Low Level		1.0	1.03	mg/L	103	(90-110)	20	0.98
MBLK	Nitrate as N by RFA Low Level			<0.03	mg/L				
MRL_CHK	Nitrate as N by RFA Low Level		0.03	0.00750	mg/L	<u>25</u>	(50-150)		
MS_201105250166	Nitrate as N by RFA Low Level	ND	1.0	4.65	mg/L	93	(90-110)		
MSD_201105250166	Nitrate as N by RFA Low Level	ND	1.0	4.73	mg/L	95	(90-110)	20	1.5

### QC Ref# 602946 - ICPMS Metals by EPA 200.8

Analysis Date: 05/27/2011

LCS1	Arsenic Total ICAP/MS		20	20.5	ug/L	102	(85-115)		
LCS2	Arsenic Total ICAP/MS		20	20.7	ug/L	103	(85-115)	20	0.97
MBLK	Arsenic Total ICAP/MS			<1	ug/L				
MRL_CHK	Arsenic Total ICAP/MS		1.0	1.01	ug/L	101	(50-150)		
MS_201105240620	Arsenic Total ICAP/MS	ND	20	22.1	ug/L	108	(70-130)		
MS2_201105250001	Arsenic Total ICAP/MS	ND	20	23.7	ug/L	114	(70-130)		
MSD_201105240620	Arsenic Total ICAP/MS	ND	20	20.7	ug/L	101	(70-130)	20	6.7
MSD2_201105250001	Arsenic Total ICAP/MS	ND	20	23.0	ug/L	111	(70-130)	20	2.7
LCS1	Barium Total ICAP/MS		100	100	ug/L	100	(85-115)		
LCS2	Barium Total ICAP/MS		100	102	ug/L	102	(85-115)	20	2.0
MBLK	Barium Total ICAP/MS			<2	ug/L				
MRL_CHK	Barium Total ICAP/MS		2.0	1.97	ug/L	99	(50-150)		
MS_201105240620	Barium Total ICAP/MS	45	100	152	ug/L	107	(70-130)		
MS2_201105250001	Barium Total ICAP/MS	68	100	176	ug/L	108	(70-130)		
MSD_201105240620	Barium Total ICAP/MS	45	100	143	ug/L	98	(70-130)	20	8.9

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

43/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)





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QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD2_201105250001	Barium Total ICAP/MS	68	100	172	ug/L	104	(70-130)	20	3.8
LCS1	Cadmium Total ICAP/MS		20	20.2	ug/L	101	(85-115)		
LCS2	Cadmium Total ICAP/MS		20	20.6	ug/L	103	(85-115)	20	2.0
MBLK	Cadmium Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Cadmium Total ICAP/MS		0.5	0.490	ug/L	98	(50-150)		
MS_201105240620	Cadmium Total ICAP/MS	ND	20	21.7	ug/L	109	(70-130)		
MS2_201105250001	Cadmium Total ICAP/MS	ND	20	21.9	ug/L	109	(70-130)		
MSD_201105240620	Cadmium Total ICAP/MS	ND	20	20.1	ug/L	101	(70-130)	20	7.6
MSD2_201105250001	Cadmium Total ICAP/MS	ND	20	21.1	ug/L	105	(70-130)	20	3.7
LCS1	Chromium Total ICAP/MS		100	104	ug/L	104	(85-115)		
LCS2	Chromium Total ICAP/MS		100	105	ug/L	105	(85-115)	20	0.96
MBLK	Chromium Total ICAP/MS			<1	ug/L				
MRL_CHK	Chromium Total ICAP/MS		1.0	1.05	ug/L	105	(50-150)		
MS_201105240620	Chromium Total ICAP/MS	4.0	100	109	ug/L	105	(70-130)		
MS2_201105250001	Chromium Total ICAP/MS	ND	100	112	ug/L	111	(70-130)		
MSD_201105240620	Chromium Total ICAP/MS	4.0	100	103	ug/L	99	(70-130)	20	6.3
MSD2_201105250001	Chromium Total ICAP/MS	ND	100	108	ug/L	108	(70-130)	20	2.7
LCS1	Copper Total ICAP/MS		100	101	ug/L	101	(85-115)		
LCS2	Copper Total ICAP/MS		100	102	ug/L	102	(85-115)	20	0.99
MBLK	Copper Total ICAP/MS			<2	ug/L				
MRL_CHK	Copper Total ICAP/MS		2.0	1.98	ug/L	99	(50-150)		
MS_201105240620	Copper Total ICAP/MS	ND	100	100	ug/L	100	(70-130)		
MS2_201105250001	Copper Total ICAP/MS	17	100	117	ug/L	100	(70-130)		
MSD_201105240620	Copper Total ICAP/MS	ND	100	93.8	ug/L	93	(70-130)	20	6.4
MSD2_201105250001	Copper Total ICAP/MS	17	100	114	ug/L	97	(70-130)	20	2.8
LCS1	Lead Total ICAP/MS		20	19.9	ug/L	100	(85-115)		
LCS2	Lead Total ICAP/MS		20	20.4	ug/L	102	(85-115)	20	2.5
MBLK	Lead Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Lead Total ICAP/MS		0.5	0.500	ug/L	100	(50-150)		
MS_201105240620	Lead Total ICAP/MS	ND	20	20.9	ug/L	104	(70-130)		
MS2_201105250001	Lead Total ICAP/MS	ND	20	21.2	ug/L	106	(70-130)		
MSD_201105240620	Lead Total ICAP/MS	ND	20	19.3	ug/L	96	(70-130)	20	8.0
MSD2_201105250001	Lead Total ICAP/MS	ND	20	20.5	ug/L	102	(70-130)	20	3.9
LCS1	Nickel Total ICAP/MS		50	50.2	ug/L	100	(85-115)		
LCS2	Nickel Total ICAP/MS		50	50.3	ug/L	101	(85-115)	20	0.20
MBLK	Nickel Total ICAP/MS			<5	ug/L				
MRL_CHK	Nickel Total ICAP/MS		5.0	5.1	ug/L	102	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

44/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS_201105240620	Nickel Total ICAP/MS	ND	50	49.0	ug/L	97	(70-130)		
MS2_201105250001	Nickel Total ICAP/MS	ND	50	54.5	ug/L	101	(70-130)		
MSD_201105240620	Nickel Total ICAP/MS	ND	50	46.1	ug/L	92	(70-130)	20	6.0
MSD2_201105250001	Nickel Total ICAP/MS	ND	50	53.0	ug/L	98	(70-130)	20	3.3
LCS1	Selenium Total ICAP/MS		20	20.5	ug/L	102	(85-115)		
LCS2	Selenium Total ICAP/MS		20	20.7	ug/L	103	(85-115)	20	0.97
MBLK	Selenium Total ICAP/MS			<5	ug/L				
MRL_CHK	Selenium Total ICAP/MS		5.0	5.13	ug/L	103	(50-150)		
MS_201105240620	Selenium Total ICAP/MS	ND	20	23.0	ug/L	112	(70-130)		
MS2_201105250001	Selenium Total ICAP/MS	ND	20	24.8	ug/L	116	(70-130)		
MSD_201105240620	Selenium Total ICAP/MS	ND	20	21.0	ug/L	102	(70-130)	20	9.3
MSD2_201105250001	Selenium Total ICAP/MS	ND	20	24.1	ug/L	112	(70-130)	20	3.5
MBLK	Silver Total ICAP/MS			<0.5	ug/L				
MRL_CHK	Silver Total ICAP/MS		0.5	0.460	ug/L	92	(50-150)		
MS_201105240620	Silver Total ICAP/MS	ND	50	50.0	ug/L	100	(70-130)		
MS2_201105250001	Silver Total ICAP/MS		50	49.1	ug/L	98	(70-130)		
MSD_201105240620	Silver Total ICAP/MS	ND	50	47.5	ug/L	95	(70-130)	20	4.9
MSD2_201105250001	Silver Total ICAP/MS		50	45.9	ug/L	92	(70-130)	20	6.8
LCS1	Zinc Total ICAP/MS		100	100	ug/L	100	(85-115)		
LCS2	Zinc Total ICAP/MS		100	102	ug/L	102	(85-115)	20	2.0
MBLK	Zinc Total ICAP/MS			<20	ug/L				
MRL_CHK	Zinc Total ICAP/MS		20	19.7	ug/L	99	(50-150)		
MS_201105240620	Zinc Total ICAP/MS	ND	100	105	ug/L	89	(70-130)		
MS2_201105250001	Zinc Total ICAP/MS	ND	100	116	ug/L	104	(70-130)		
MSD_201105240620	Zinc Total ICAP/MS	ND	100	97.4	ug/L	81	(70-130)	20	9.2
MSD2_201105250001	Zinc Total ICAP/MS	ND	100	111	ug/L	99	(70-130)	20	5.3

### QC Ref# 603249 - Volatile Organics by GCMS by EPA 8260

Analysis Date: 05/25/2011

LCS1	1,1,1,2-Tetrachloroethane		5.0	4.31	ug/L	86	(70-130)		
LCS2	1,1,1,2-Tetrachloroethane		5.0	4.4	ug/L	88	(70-130)	20	2.1
MBLK	1,1,1,2-Tetrachloroethane			<0.25	ug/L				
MRL_CHK	1,1,1,2-Tetrachloroethane		0.5	0.390	ug/L	78	(50-150)		
MS_201105120414	1,1,1,2-Tetrachloroethane	ND	10	8.24	ug/L	82	(70-130)		
MS_201105170477	1,1,1,2-Tetrachloroethane	ND	10	9.23	ug/L	92	(70-130)		
MSD_201105120414	1,1,1,2-Tetrachloroethane	ND	10	9.39	ug/L	94	(70-130)	20	13
MSD_201105170477	1,1,1,2-Tetrachloroethane	ND	10	9.48	ug/L	95	(70-130)	20	2.7
LCS1	1,1,1-Trichloroethane		5.0	4.73	ug/L	95	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

45/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	1,1,1-Trichloroethane		5.0	4.79	ug/L	96	(70-130)	20	1.3
MBLK	1,1,1-Trichloroethane			<0.25	ug/L				
MRL_CHK	1,1,1-Trichloroethane		0.5	0.520	ug/L	104	(50-150)		
MS_201105120414	1,1,1-Trichloroethane	ND	10	9.52	ug/L	95	(70-130)		
MS_201105170477	1,1,1-Trichloroethane	ND	10	10.6	ug/L	106	(70-130)		
MSD_201105120414	1,1,1-Trichloroethane	ND	10	11.0	ug/L	110	(70-130)	20	14
MSD_201105170477	1,1,1-Trichloroethane	ND	10	10.8	ug/L	108	(70-130)	20	1.9
LCS1	1,1,2,2-Tetrachloroethane		5.0	4.66	ug/L	93	(70-130)		
LCS2	1,1,2,2-Tetrachloroethane		5.0	4.82	ug/L	96	(70-130)	20	3.4
MBLK	1,1,2,2-Tetrachloroethane			<0.25	ug/L				
MRL_CHK	1,1,2,2-Tetrachloroethane		0.5	0.580	ug/L	116	(50-150)		
MS_201105120414	1,1,2,2-Tetrachloroethane	ND	10	9.2	ug/L	92	(70-130)		
MS_201105170477	1,1,2,2-Tetrachloroethane	ND	10	9.14	ug/L	91	(70-130)		
MSD_201105120414	1,1,2,2-Tetrachloroethane	ND	10	9.63	ug/L	96	(70-130)	20	4.6
MSD_201105170477	1,1,2,2-Tetrachloroethane	ND	10	9.68	ug/L	97	(70-130)	20	5.7
LCS1	1,1,2-Trichloroethane		5.0	5.05	ug/L	101	(70-130)		
LCS2	1,1,2-Trichloroethane		5.0	5.43	ug/L	109	(70-130)	20	7.3
MBLK	1,1,2-Trichloroethane			<0.25	ug/L				
MRL_CHK	1,1,2-Trichloroethane		0.5	0.560	ug/L	112	(50-150)		
MS_201105120414	1,1,2-Trichloroethane	ND	10	10.1	ug/L	101	(70-130)		
MS_201105170477	1,1,2-Trichloroethane	ND	10	10.3	ug/L	103	(70-130)		
MSD_201105120414	1,1,2-Trichloroethane	ND	10	10.5	ug/L	105	(70-130)	20	3.9
MSD_201105170477	1,1,2-Trichloroethane	ND	10	10.5	ug/L	105	(70-130)	20	1.9
LCS1	1,1-Dichloroethane		5.0	4.99	ug/L	100	(70-130)		
LCS2	1,1-Dichloroethane		5.0	5.14	ug/L	103	(70-130)	20	3.0
MBLK	1,1-Dichloroethane			<0.25	ug/L				
MRL_CHK	1,1-Dichloroethane		0.5	0.560	ug/L	112	(50-150)		
MS_201105120414	1,1-Dichloroethane	ND	10	9.96	ug/L	100	(70-130)		
MS_201105170477	1,1-Dichloroethane	ND	10	10.8	ug/L	108	(70-130)		
MSD_201105120414	1,1-Dichloroethane	ND	10	10.9	ug/L	109	(70-130)	20	9.0
MSD_201105170477	1,1-Dichloroethane	ND	10	10.8	ug/L	108	(70-130)	20	0.0
LCS1	1,1-Dichloroethylene		5.0	4.88	ug/L	98	(70-130)		
LCS2	1,1-Dichloroethylene		5.0	4.97	ug/L	99	(70-130)	20	1.8
MBLK	1,1-Dichloroethylene			<0.25	ug/L				
MRL_CHK	1,1-Dichloroethylene		0.5	0.550	ug/L	110	(50-150)		
MS_201105120414	1,1-Dichloroethylene	ND	10	10.5	ug/L	105	(70-130)		
MS_201105170477	1,1-Dichloroethylene	ND	10	11.3	ug/L	113	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



# MWH

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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201105120414	1,1-Dichloroethylene	ND	10	11.6	ug/L	116	(70-130)	20	9.9
MSD_201105170477	1,1-Dichloroethylene	ND	10	11.3	ug/L	113	(70-130)	20	0.0
LCS1	1,2,3-Trichloropropane		5.0	4.86	ug/L	97	(70-130)		
LCS2	1,2,3-Trichloropropane		5.0	5.03	ug/L	101	(70-130)	20	3.4
MBLK	1,2,3-Trichloropropane			<0.25	ug/L				
MRL_CHK	1,2,3-Trichloropropane		0.5	0.620	ug/L	124	(50-150)		
MS_201105120414	1,2,3-Trichloropropane	ND	10	9.61	ug/L	96	(70-130)		
MS_201105170477	1,2,3-Trichloropropane	ND	10	9.64	ug/L	96	(70-130)		
MSD_201105120414	1,2,3-Trichloropropane	ND	10	9.98	ug/L	100	(70-130)	20	3.8
MSD_201105170477	1,2,3-Trichloropropane	ND	10	9.64	ug/L	96	(70-130)	20	0.0
LCS1	1,2-Dichloroethane		5.0	5.08	ug/L	102	(70-130)		
LCS2	1,2-Dichloroethane		5.0	5.06	ug/L	101	(70-130)	20	0.39
MBLK	1,2-Dichloroethane			<0.25	ug/L				
MRL_CHK	1,2-Dichloroethane		0.5	0.530	ug/L	106	(50-150)		
MS_201105120414	1,2-Dichloroethane	ND	10	9.83	ug/L	98	(70-130)		
MS_201105170477	1,2-Dichloroethane	ND	10	10.1	ug/L	101	(70-130)		
MSD_201105120414	1,2-Dichloroethane	ND	10	10.3	ug/L	103	(70-130)	20	4.7
MSD_201105170477	1,2-Dichloroethane	ND	10	10.3	ug/L	103	(70-130)	20	2.0
LCS1	1,2-Dichloroethane-d4 (S)			99.2	%	99	(70-130)		
LCS2	1,2-Dichloroethane-d4 (S)			103	%	103	(70-130)		
MBLK	1,2-Dichloroethane-d4 (S)			106	%	106	(70-130)		
MRL_CHK	1,2-Dichloroethane-d4 (S)			103	%	103	(70-130)		
MS_201105120414	1,2-Dichloroethane-d4 (S)			98.4	%	98	(70-130)		
MS_201105170477	1,2-Dichloroethane-d4 (S)			103	%	103	(70-130)		
MSD_201105120414	1,2-Dichloroethane-d4 (S)			101	%	101	(70-130)		
MSD_201105170477	1,2-Dichloroethane-d4 (S)			101	%	101	(70-130)		
LCS1	1,2-Dichloropropane		5.0	5.06	ug/L	101	(70-130)		
LCS2	1,2-Dichloropropane		5.0	5.1	ug/L	102	(70-130)	20	0.79
MBLK	1,2-Dichloropropane			<0.25	ug/L				
MRL_CHK	1,2-Dichloropropane		0.5	0.610	ug/L	122	(50-150)		
MS_201105120414	1,2-Dichloropropane	ND	10	9.99	ug/L	100	(70-130)		
MS_201105170477	1,2-Dichloropropane	ND	10	10.4	ug/L	104	(70-130)		
MSD_201105120414	1,2-Dichloropropane	ND	10	10.7	ug/L	107	(70-130)	20	6.9
MSD_201105170477	1,2-Dichloropropane	ND	10	10.6	ug/L	106	(70-130)	20	1.9
LCS1	2-Butanone (MEK)		50	51.1	ug/L	102	(70-130)		
LCS2	2-Butanone (MEK)		50	53.4	ug/L	107	(70-130)	20	4.6
MBLK	2-Butanone (MEK)			<2.5	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



# MWH

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Laboratory  
QC Report: 364587

### City of Phoenix (continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	2-Butanone (MEK)		5.0	5.62	ug/L	112	(50-150)		
MS_201105120414	2-Butanone (MEK)	ND	100	97.7	ug/L	98	(70-130)		
MS_201105170477	2-Butanone (MEK)	ND	100	105	ug/L	105	(70-130)		
MSD_201105120414	2-Butanone (MEK)	ND	100	106	ug/L	106	(70-130)	20	8.2
MSD_201105170477	2-Butanone (MEK)	ND	100	105	ug/L	105	(70-130)	20	0.0
LCS1	2-Hexanone		50	52.1	ug/L	104	(70-130)		
LCS2	2-Hexanone		50	53.2	ug/L	106	(70-130)	20	2.1
MBLK	2-Hexanone			<5.0	ug/L				
MRL_CHK	2-Hexanone		5.0	6.02	ug/L	120	(50-150)		
MS_201105120414	2-Hexanone	ND	100	103	ug/L	103	(70-130)		
MS_201105170477	2-Hexanone	ND	100	107	ug/L	107	(70-130)		
MSD_201105120414	2-Hexanone	ND	100	111	ug/L	111	(70-130)	20	7.5
MSD_201105170477	2-Hexanone	ND	100	108	ug/L	108	(70-130)	20	0.93
LCS1	4-Bromofluorobenzene (S)			97.4	%	97	(70-130)		
LCS2	4-Bromofluorobenzene (S)			101	%	101	(70-130)		
MBLK	4-Bromofluorobenzene (S)			95.2	%	95	(70-130)		
MRL_CHK	4-Bromofluorobenzene (S)			96.0	%	96	(70-130)		
MS_201105120414	4-Bromofluorobenzene (S)			98.0	%	98	(70-130)		
MS_201105170477	4-Bromofluorobenzene (S)			94.0	%	94	(70-130)		
MSD_201105120414	4-Bromofluorobenzene (S)			98.4	%	98	(70-130)		
MSD_201105170477	4-Bromofluorobenzene (S)			97.8	%	98	(70-130)		
LCS1	4-Methyl-2-Pentanone (MIBK)		50	50.6	ug/L	101	(70-130)		
LCS2	4-Methyl-2-Pentanone (MIBK)		50	52.2	ug/L	104	(70-130)	20	3.1
MBLK	4-Methyl-2-Pentanone (MIBK)			<2.5	ug/L				
MRL_CHK	4-Methyl-2-Pentanone (MIBK)		5.0	5.69	ug/L	114	(50-150)		
MS_201105120414	4-Methyl-2-Pentanone (MIBK)	ND	100	102	ug/L	102	(70-130)		
MS_201105170477	4-Methyl-2-Pentanone (MIBK)	ND	100	105	ug/L	105	(70-130)		
MSD_201105120414	4-Methyl-2-Pentanone (MIBK)	ND	100	109	ug/L	109	(70-130)	20	6.6
MSD_201105170477	4-Methyl-2-Pentanone (MIBK)	ND	100	106	ug/L	106	(70-130)	20	0.95
LCS1	Acetone		50	49.2	ug/L	98	(70-130)		
LCS2	Acetone		50	51.0	ug/L	102	(70-130)	20	3.6
MBLK	Acetone			<5	ug/L				
MRL_CHK	Acetone		5.0	5.58	ug/L	112	(50-150)		
MS_201105120414	Acetone	ND	100	94.3	ug/L	94	(70-130)		
MS_201105170477	Acetone	ND	100	115	ug/L	115	(70-130)		
MSD_201105120414	Acetone	ND	100	102	ug/L	102	(70-130)	20	7.8
MSD_201105170477	Acetone	ND	100	92.9	ug/L	93	(70-130)	20	<u>21</u>

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

### City of Phoenix (continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS1	Acrylonitrile (Screen)		5.0	5.46	ug/L	109	(70-130)		
LCS2	Acrylonitrile (Screen)			5.49	ug/L				
MBLK	Acrylonitrile (Screen)			<50	ug/L				
MRL_CHK	Acrylonitrile (Screen)		0.5	0.480	ug/L	96	(15-150)		
MS_201105120414	Acrylonitrile (Screen)	ND	10	10.5	ug/L	105	(70-130)		
MS_201105170477	Acrylonitrile (Screen)	ND	10	11.0	ug/L	110	(70-130)		
MSD_201105120414	Acrylonitrile (Screen)	ND	10	11.6	ug/L	116	(70-130)	20	9.9
MSD_201105170477	Acrylonitrile (Screen)	ND	10	10.6	ug/L	106	(70-130)	20	3.7
LCS1	Benzene		5.0	5.09	ug/L	102	(70-130)		
LCS2	Benzene		5.0	5.07	ug/L	101	(70-130)	20	0.39
MBLK	Benzene			<0.25	ug/L				
MRL_CHK	Benzene		0.5	0.530	ug/L	106	(50-150)		
MS_201105120414	Benzene	ND	10	10.1	ug/L	101	(70-130)		
MS_201105170477	Benzene	ND	10	10.6	ug/L	106	(70-130)		
MSD_201105120414	Benzene	ND	10	11.0	ug/L	110	(70-130)	20	8.5
MSD_201105170477	Benzene	ND	10	10.8	ug/L	108	(70-130)	20	1.9
LCS1	Bromochloromethane		5.0	5.08	ug/L	102	(70-130)		
LCS2	Bromochloromethane		5.0	5.03	ug/L	101	(70-130)	20	0.99
MBLK	Bromochloromethane			<0.25	ug/L				
MRL_CHK	Bromochloromethane		0.5	0.550	ug/L	110	(50-150)		
MS_201105120414	Bromochloromethane	ND	10	9.66	ug/L	97	(70-130)		
MS_201105170477	Bromochloromethane	ND	10	10.2	ug/L	102	(70-130)		
MSD_201105120414	Bromochloromethane	ND	10	10.8	ug/L	108	(70-130)	20	11
MSD_201105170477	Bromochloromethane	ND	10	10.4	ug/L	104	(70-130)	20	1.9
LCS1	Bromodichloromethane		5.0	4.73	ug/L	95	(70-130)		
LCS2	Bromodichloromethane		5.0	4.75	ug/L	95	(70-130)	20	0.42
MBLK	Bromodichloromethane			<0.25	ug/L				
MRL_CHK	Bromodichloromethane		0.5	0.460	ug/L	92	(50-150)		
MS_201105120414	Bromodichloromethane	ND	10	8.89	ug/L	89	(70-130)		
MS_201105170477	Bromodichloromethane	ND	10	9.72	ug/L	97	(70-130)		
MSD_201105120414	Bromodichloromethane	ND	10	9.87	ug/L	99	(70-130)	20	10
MSD_201105170477	Bromodichloromethane	ND	10	9.98	ug/L	100	(70-130)	20	2.6
LCS1	Bromoform		5.0	4.05	ug/L	81	(70-130)		
LCS2	Bromoform		5.0	4.1	ug/L	82	(70-130)	20	1.2
MBLK	Bromoform			<0.25	ug/L				
MRL_CHK	Bromoform		0.5	0.640	ug/L	128	(50-150)		
MS_201105120414	Bromoform	ND	10	7.99	ug/L	80	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

49/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS_201105170477	Bromoform	ND	10	8.79	ug/L	88	(70-130)		
MSD_201105120414	Bromoform	ND	10	8.99	ug/L	90	(70-130)	20	12
MSD_201105170477	Bromoform	ND	10	9.2	ug/L	92	(70-130)	20	4.6
LCS1	Bromomethane (Methyl Bromide)		5.0	5.7	ug/L	114	(70-130)		
LCS2	Bromomethane (Methyl Bromide)		5.0	5.55	ug/L	111	(70-130)	20	2.7
MBLK	Bromomethane (Methyl Bromide)			<0.25	ug/L				
MRL_CHK	Bromomethane (Methyl Bromide)		0.5	0.600	ug/L	120	(50-150)		
MS_201105120414	Bromomethane (Methyl Bromide)	ND	10	10.8	ug/L	108	(70-130)		
MS_201105170477	Bromomethane (Methyl Bromide)	ND	10	11.5	ug/L	115	(70-130)		
MSD_201105120414	Bromomethane (Methyl Bromide)	ND	10	11.8	ug/L	118	(70-130)	20	8.8
MSD_201105170477	Bromomethane (Methyl Bromide)	ND	10	12.4	ug/L	124	(70-130)	20	7.5
LCS1	Carbon disulfide		5.0	4.83	ug/L	97	(70-130)		
LCS2	Carbon disulfide		5.0	4.61	ug/L	92	(70-130)	20	4.7
MBLK	Carbon disulfide			<0.25	ug/L				
MRL_CHK	Carbon disulfide		0.5	0.610	ug/L	122	(50-150)		
MS_201105120414	Carbon disulfide	ND	10	8.8	ug/L	88	(70-130)		
MS_201105170477	Carbon disulfide	ND	10	9.72	ug/L	97	(70-130)		
MSD_201105120414	Carbon disulfide	ND	10	9.4	ug/L	94	(70-130)	20	6.6
MSD_201105170477	Carbon disulfide	ND	10	10.1	ug/L	101	(70-130)	20	3.8
LCS1	Carbon Tetrachloride		5.0	4.14	ug/L	83	(70-130)		
LCS2	Carbon Tetrachloride		5.0	4.19	ug/L	84	(70-130)	20	1.2
MBLK	Carbon Tetrachloride			<0.25	ug/L				
MRL_CHK	Carbon Tetrachloride		0.5	0.450	ug/L	90	(50-150)		
MS_201105120414	Carbon Tetrachloride	ND	10	8.45	ug/L	85	(70-130)		
MS_201105170477	Carbon Tetrachloride	ND	10	9.87	ug/L	99	(70-130)		
MSD_201105120414	Carbon Tetrachloride	ND	10	9.86	ug/L	99	(70-130)	20	15
MSD_201105170477	Carbon Tetrachloride	ND	10	10.3	ug/L	103	(70-130)	20	4.3
LCS1	Chlorobenzene		5.0	5.02	ug/L	100	(70-130)		
LCS2	Chlorobenzene		5.0	5.02	ug/L	100	(70-130)	20	0.0
MBLK	Chlorobenzene			<0.25	ug/L				
MRL_CHK	Chlorobenzene		0.5	0.480	ug/L	96	(50-150)		
MS_201105120414	Chlorobenzene	ND	10	9.79	ug/L	98	(70-130)		
MS_201105170477	Chlorobenzene	ND	10	10.3	ug/L	102	(70-130)		
MSD_201105120414	Chlorobenzene	ND	10	10.5	ug/L	105	(70-130)	20	7.0
MSD_201105170477	Chlorobenzene	ND	10	10.4	ug/L	104	(70-130)	20	1.9
LCS1	Chlorodibromomethane		5.0	4.62	ug/L	92	(70-130)		
LCS2	Chlorodibromomethane		5.0	4.86	ug/L	97	(70-130)	20	5.1

Spike recovery is already corrected for native results.

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Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)





# MWH

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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MBLK	Chlorodibromomethane			<0.25	ug/L				
MRL_CHK	Chlorodibromomethane		0.5	0.390	ug/L	78	(50-150)		
MS_201105120414	Chlorodibromomethane	ND	10	8.9	ug/L	89	(70-130)		
MS_201105170477	Chlorodibromomethane	ND	10	9.79	ug/L	98	(70-130)		
MSD_201105120414	Chlorodibromomethane	ND	10	9.98	ug/L	100	(70-130)	20	11
MSD_201105170477	Chlorodibromomethane	ND	10	10.4	ug/L	104	(70-130)	20	6.0
LCS1	Chloroethane		5.0	4.95	ug/L	99	(70-130)		
LCS2	Chloroethane		5.0	5.15	ug/L	103	(70-130)	20	4.0
MBLK	Chloroethane			<0.25	ug/L				
MRL_CHK	Chloroethane		0.5	0.680	ug/L	136	(50-150)		
MS_201105120414	Chloroethane	ND	10	11.3	ug/L	113	(70-130)		
MS_201105170477	Chloroethane	ND	10	11.2	ug/L	112	(70-130)		
MSD_201105120414	Chloroethane	ND	10	11.6	ug/L	116	(70-130)	20	2.6
MSD_201105170477	Chloroethane	ND	10	12.1	ug/L	121	(70-130)	20	7.7
LCS1	Chloroform (Trichloromethane)		5.0	4.9	ug/L	98	(70-130)		
LCS2	Chloroform (Trichloromethane)		5.0	5.14	ug/L	103	(70-130)	20	4.8
MBLK	Chloroform (Trichloromethane)			<0.25	ug/L				
MRL_CHK	Chloroform (Trichloromethane)		0.5	0.560	ug/L	112	(50-150)		
MS_201105120414	Chloroform (Trichloromethane)	ND	10	9.55	ug/L	96	(70-130)		
MS_201105170477	Chloroform (Trichloromethane)	ND	10	10.4	ug/L	104	(70-130)		
MSD_201105120414	Chloroform (Trichloromethane)	ND	10	10.6	ug/L	106	(70-130)	20	10
MSD_201105170477	Chloroform (Trichloromethane)	ND	10	10.5	ug/L	105	(70-130)	20	0.96
LCS1	Chloromethane(Methyl Chloride)		5.0	4.96	ug/L	99	(70-130)		
LCS2	Chloromethane(Methyl Chloride)		5.0	4.86	ug/L	97	(70-130)	20	2.0
MBLK	Chloromethane(Methyl Chloride)			<0.25	ug/L				
MRL_CHK	Chloromethane(Methyl Chloride)		0.5	0.590	ug/L	118	(50-150)		
MS_201105120414	Chloromethane(Methyl Chloride)	ND	10	10.3	ug/L	103	(70-130)		
MS_201105170477	Chloromethane(Methyl Chloride)	ND	10	10.5	ug/L	105	(70-130)		
MSD_201105120414	Chloromethane(Methyl Chloride)	ND	10	11.2	ug/L	111	(70-130)	20	7.5
MSD_201105170477	Chloromethane(Methyl Chloride)	ND	10	10.6	ug/L	106	(70-130)	20	0.95
LCS1	cis-1,2-Dichloroethylene		5.0	4.94	ug/L	99	(70-130)		
LCS2	cis-1,2-Dichloroethylene		5.0	5.12	ug/L	102	(70-130)	20	3.6
MBLK	cis-1,2-Dichloroethylene			<0.25	ug/L				
MRL_CHK	cis-1,2-Dichloroethylene		0.5	0.590	ug/L	118	(50-150)		
MS_201105120414	cis-1,2-Dichloroethylene	ND	10	9.82	ug/L	98	(70-130)		
MS_201105170477	cis-1,2-Dichloroethylene	ND	10	10.1	ug/L	101	(70-130)		
MSD_201105120414	cis-1,2-Dichloroethylene	ND	10	10.7	ug/L	107	(70-130)	20	8.6

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

51/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201105170477	cis-1,2-Dichloroethylene	ND	10	10.4	ug/L	104	(70-130)	20	2.9
LCS1	cis-1,3-Dichloropropene		5.0	4.58	ug/L	92	(70-130)		
LCS2	cis-1,3-Dichloropropene		5.0	4.76	ug/L	95	(70-130)	20	3.9
MBLK	cis-1,3-Dichloropropene			<0.25	ug/L				
MRL_CHK	cis-1,3-Dichloropropene		0.5	0.480	ug/L	96	(50-150)		
MS_201105120414	cis-1,3-Dichloropropene	ND	10	9.33	ug/L	93	(70-130)		
MS_201105170477	cis-1,3-Dichloropropene	ND	10	10.3	ug/L	103	(70-130)		
MSD_201105120414	cis-1,3-Dichloropropene	ND	10	10.2	ug/L	102	(70-130)	20	8.9
MSD_201105170477	cis-1,3-Dichloropropene	ND	10	10.3	ug/L	103	(70-130)	20	0.0
LCS1	Dibromomethane		5.0	4.83	ug/L	97	(70-130)		
LCS2	Dibromomethane		5.0	5.03	ug/L	101	(70-130)	20	4.1
MBLK	Dibromomethane			<0.25	ug/L				
MRL_CHK	Dibromomethane		0.5	0.530	ug/L	106	(50-150)		
MS_201105120414	Dibromomethane	ND	10	9.64	ug/L	96	(70-130)		
MS_201105170477	Dibromomethane	ND	10	10.0	ug/L	100	(70-130)		
MSD_201105120414	Dibromomethane	ND	10	10.3	ug/L	103	(70-130)	20	6.6
MSD_201105170477	Dibromomethane	ND	10	10.4	ug/L	104	(70-130)	20	3.9
LCS1	Dichloromethane		5.0	5.07	ug/L	101	(70-130)		
LCS2	Dichloromethane		5.0	5.01	ug/L	100	(70-130)	20	1.2
MBLK	Dichloromethane			<0.25	ug/L				
MRL_CHK	Dichloromethane		0.5	0.560	ug/L	112	(50-150)		
MS_201105120414	Dichloromethane	ND	10	9.65	ug/L	97	(70-130)		
MS_201105170477	Dichloromethane	ND	10	10.3	ug/L	103	(70-130)		
MSD_201105120414	Dichloromethane	ND	10	10.5	ug/L	105	(70-130)	20	8.4
MSD_201105170477	Dichloromethane	ND	10	10.2	ug/L	102	(70-130)	20	0.98
LCS1	Ethyl benzene		5.0	5.11	ug/L	102	(70-130)		
LCS2	Ethyl benzene		5.0	5.12	ug/L	102	(70-130)	20	0.20
MBLK	Ethyl benzene			<0.25	ug/L				
MRL_CHK	Ethyl benzene		0.5	0.540	ug/L	108	(50-150)		
MS_201105120414	Ethyl benzene	ND	10	10.2	ug/L	102	(70-130)		
MS_201105170477	Ethyl benzene	ND	10	10.7	ug/L	107	(70-130)		
MSD_201105120414	Ethyl benzene	ND	10	11.3	ug/L	113	(70-130)	20	10
MSD_201105170477	Ethyl benzene	ND	10	11.2	ug/L	112	(70-130)	20	4.6
LCS1	Iodomethane		5.0	5.88	ug/L	118	(70-130)		
LCS2	Iodomethane			6.13	ug/L				
MBLK	Iodomethane			<0.1	ug/L				
MRL_CHK	Iodomethane		0.5	0.530	ug/L	106	(50-150)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

### City of Phoenix (continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MS_201105120414	Iodomethane	ND	10	9.08	ug/L	91	(70-130)		
MS_201105170477	Iodomethane	ND	10	9.04	ug/L	90	(70-130)		
MSD_201105120414	Iodomethane	ND	10	9.22	ug/L	92	(70-130)	20	1.5
MSD_201105170477	Iodomethane	ND	10	8.94	ug/L	89	(70-130)	20	1.1
LCS1	m,p-Xylenes		10	10.1	ug/L	101	(70-130)		
LCS2	m,p-Xylenes		10	9.77	ug/L	98	(70-130)	20	3.3
MBLK	m,p-Xylenes			<0.25	ug/L				
MRL_CHK	m,p-Xylenes		1.0	0.990	ug/L	99	(50-150)		
MS_201105120414	m,p-Xylenes	ND	20	19.6	ug/L	98	(70-130)		
MS_201105170477	m,p-Xylenes	ND	20	20.8	ug/L	104	(70-130)		
MSD_201105120414	m,p-Xylenes	ND	20	21.7	ug/L	109	(70-130)	20	11
MSD_201105170477	m,p-Xylenes	ND	20	21.4	ug/L	107	(70-130)	20	2.8
LCS1	Methyl Tert-butyl ether (MTBE)		5.0	4.73	ug/L	95	(70-130)		
LCS2	Methyl Tert-butyl ether (MTBE)		5.0	4.82	ug/L	96	(70-130)	20	1.9
MBLK	Methyl Tert-butyl ether (MTBE)			<0.25	ug/L				
MRL_CHK	Methyl Tert-butyl ether (MTBE)		0.5	0.520	ug/L	104	(50-150)		
MS_201105120414	Methyl Tert-butyl ether (MTBE)	ND	10	9.3	ug/L	93	(70-130)		
MS_201105170477	Methyl Tert-butyl ether (MTBE)	ND	10	9.98	ug/L	100	(70-130)		
MSD_201105120414	Methyl Tert-butyl ether (MTBE)	ND	10	10.2	ug/L	102	(70-130)	20	9.2
MSD_201105170477	Methyl Tert-butyl ether (MTBE)	ND	10	10.1	ug/L	101	(70-130)	20	1.2
LCS1	o-Dichlorobenzene (1,2-DCB)		5.0	5.00	ug/L	100	(70-130)		
LCS2	o-Dichlorobenzene (1,2-DCB)		5.0	4.95	ug/L	99	(70-130)	20	1.0
MBLK	o-Dichlorobenzene (1,2-DCB)			<0.25	ug/L				
MRL_CHK	o-Dichlorobenzene (1,2-DCB)		0.5	0.580	ug/L	116	(50-150)		
MS_201105120414	o-Dichlorobenzene (1,2-DCB)	ND	10	10.0	ug/L	100	(70-130)		
MS_201105170477	o-Dichlorobenzene (1,2-DCB)	ND	10	10.4	ug/L	104	(70-130)		
MSD_201105120414	o-Dichlorobenzene (1,2-DCB)	ND	10	10.6	ug/L	106	(70-130)	20	5.8
MSD_201105170477	o-Dichlorobenzene (1,2-DCB)	ND	10	10.4	ug/L	104	(70-130)	20	0.0
LCS1	o-Xylene		5.0	4.86	ug/L	97	(70-130)		
LCS2	o-Xylene		5.0	4.91	ug/L	98	(70-130)	20	1.0
MBLK	o-Xylene			<0.25	ug/L				
MRL_CHK	o-Xylene		0.5	0.500	ug/L	100	(50-150)		
MS_201105120414	o-Xylene	ND	10	9.74	ug/L	97	(70-130)		
MS_201105170477	o-Xylene	ND	10	10.1	ug/L	101	(70-130)		
MSD_201105120414	o-Xylene	ND	10	10.6	ug/L	106	(70-130)	20	8.5
MSD_201105170477	o-Xylene	ND	10	10.3	ug/L	103	(70-130)	20	2.0
LCS1	p-Dichlorobenzene (1,4-DCB)		5.0	4.71	ug/L	94	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

53/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
LCS2	p-Dichlorobenzene (1,4-DCB)		5.0	4.77	ug/L	95	(70-130)	20	1.3
MBLK	p-Dichlorobenzene (1,4-DCB)			<0.25	ug/L				
MRL_CHK	p-Dichlorobenzene (1,4-DCB)		0.5	0.510	ug/L	102	(50-150)		
MS_201105120414	p-Dichlorobenzene (1,4-DCB)	ND	10	9.7	ug/L	97	(70-130)		
MS_201105170477	p-Dichlorobenzene (1,4-DCB)	ND	10	10.1	ug/L	101	(70-130)		
MSD_201105120414	p-Dichlorobenzene (1,4-DCB)	ND	10	10.6	ug/L	106	(70-130)	20	8.9
MSD_201105170477	p-Dichlorobenzene (1,4-DCB)	ND	10	10.1	ug/L	101	(70-130)	20	0.0
LCS1	Styrene		5.0	5.16	ug/L	103	(70-130)		
LCS2	Styrene		5.0	5.1	ug/L	102	(70-130)	20	1.2
MBLK	Styrene			<0.25	ug/L				
MRL_CHK	Styrene		0.5	0.510	ug/L	102	(50-150)		
MS_201105120414	Styrene	ND	10	7.49	ug/L	75	(70-130)		
MS_201105170477	Styrene	ND	10	7.72	ug/L	77	(70-130)		
MSD_201105120414	Styrene	ND	10	8.02	ug/L	80	(70-130)	20	6.8
MSD_201105170477	Styrene	ND	10	8.59	ug/L	86	(70-130)	20	11
LCS1	Tetrachloroethylene (PCE)		5.0	4.72	ug/L	94	(70-130)		
LCS2	Tetrachloroethylene (PCE)		5.0	4.88	ug/L	98	(70-130)	20	3.3
MBLK	Tetrachloroethylene (PCE)			<0.25	ug/L				
MRL_CHK	Tetrachloroethylene (PCE)		0.5	0.480	ug/L	96	(50-150)		
MS_201105120414	Tetrachloroethylene (PCE)	ND	10	9.91	ug/L	99	(70-130)		
MS_201105170477	Tetrachloroethylene (PCE)	ND	10	10.6	ug/L	106	(70-130)		
MSD_201105120414	Tetrachloroethylene (PCE)	ND	10	11.1	ug/L	111	(70-130)	20	11
MSD_201105170477	Tetrachloroethylene (PCE)	ND	10	10.9	ug/L	109	(70-130)	20	2.8
LCS1	Toluene		5.0	5.04	ug/L	101	(70-130)		
LCS2	Toluene		5.0	5.09	ug/L	102	(70-130)	20	0.99
MBLK	Toluene			<0.25	ug/L				
MRL_CHK	Toluene		0.5	0.540	ug/L	108	(50-150)		
MS_201105120414	Toluene	ND	10	10.2	ug/L	102	(70-130)		
MS_201105170477	Toluene	ND	10	10.6	ug/L	106	(70-130)		
MSD_201105120414	Toluene	ND	10	11.0	ug/L	110	(70-130)	20	7.5
MSD_201105170477	Toluene	ND	10	10.8	ug/L	108	(70-130)	20	1.9
LCS1	Toluene-d8 (S)			102	%	102	(70-130)		
LCS2	Toluene-d8 (S)			105	%	105	(70-130)		
MBLK	Toluene-d8 (S)			97.0	%	97	(70-130)		
MRL_CHK	Toluene-d8 (S)			103	%	103	(70-130)		
MS_201105120414	Toluene-d8 (S)			102	%	102	(70-130)		
MS_201105170477	Toluene-d8 (S)			98.6	%	99	(70-130)		

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

54/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



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Laboratory  
QC Report: 364587

### City of Phoenix (continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MSD_201105120414	Toluene-d8 (S)			101	%	101	(70-130)		
MSD_201105170477	Toluene-d8 (S)			102	%	102	(70-130)		
LCS1	trans-1,2-Dichloroethylene		5.0	4.96	ug/L	99	(70-130)		
LCS2	trans-1,2-Dichloroethylene		5.0	4.9	ug/L	98	(70-130)	20	1.2
MBLK	trans-1,2-Dichloroethylene			<0.25	ug/L				
MRL_CHK	trans-1,2-Dichloroethylene		0.5	0.490	ug/L	98	(50-150)		
MS_201105120414	trans-1,2-Dichloroethylene	ND	10	10.0	ug/L	100	(70-130)		
MS_201105170477	trans-1,2-Dichloroethylene	ND	10	10.9	ug/L	109	(70-130)		
MSD_201105120414	trans-1,2-Dichloroethylene	ND	10	11.1	ug/L	111	(70-130)	20	10
MSD_201105170477	trans-1,2-Dichloroethylene	ND	10	10.9	ug/L	109	(70-130)	20	0.0
LCS1	trans-1,3-Dichloropropene		5.0	4.36	ug/L	87	(70-130)		
LCS2	trans-1,3-Dichloropropene		5.0	4.48	ug/L	90	(70-130)	20	2.7
MBLK	trans-1,3-Dichloropropene			<0.25	ug/L				
MRL_CHK	trans-1,3-Dichloropropene		0.5	0.760	ug/L	<u>152</u>	(50-150)		
MS_201105120414	trans-1,3-Dichloropropene	ND	10	8.19	ug/L	82	(70-130)		
MS_201105170477	trans-1,3-Dichloropropene	ND	10	8.99	ug/L	90	(70-130)		
MSD_201105120414	trans-1,3-Dichloropropene	ND	10	8.93	ug/L	89	(70-130)	20	8.6
MSD_201105170477	trans-1,3-Dichloropropene	ND	10	9.2	ug/L	92	(70-130)	20	2.3
LCS1	trans-1,4-dichloro-2-butene		5.0	5.71	ug/L	114	(70-130)		
LCS2	trans-1,4-dichloro-2-butene			5.76	ug/L				
MBLK	trans-1,4-dichloro-2-butene			<10	ug/L				
MRLHI	trans-1,4-dichloro-2-butene		5.0	5.5	ug/L	110	(50-150)		
MS_201105120414	trans-1,4-dichloro-2-butene	ND	10	17.3	ug/L	<u>173</u>	(70-130)		
MS_201105170477	trans-1,4-dichloro-2-butene	ND	10	19.6	ug/L	<u>196</u>	(70-130)		
MSD_201105120414	trans-1,4-dichloro-2-butene	ND	10	19.2	ug/L	<u>192</u>	(70-130)	20	10
MSD_201105170477	trans-1,4-dichloro-2-butene	ND	10	17.8	ug/L	<u>178</u>	(70-130)	20	9.6
LCS1	Trichloroethylene (TCE)		5.0	4.77	ug/L	95	(70-130)		
LCS2	Trichloroethylene (TCE)		5.0	4.82	ug/L	96	(70-130)	20	1.0
MBLK	Trichloroethylene (TCE)			<0.25	ug/L				
MRL_CHK	Trichloroethylene (TCE)		0.5	0.550	ug/L	110	(50-150)		
MS_201105120414	Trichloroethylene (TCE)	ND	10	10.1	ug/L	101	(70-130)		
MS_201105170477	Trichloroethylene (TCE)	ND	10	10.8	ug/L	108	(70-130)		
MSD_201105120414	Trichloroethylene (TCE)	ND	10	11.3	ug/L	113	(70-130)	20	11
MSD_201105170477	Trichloroethylene (TCE)	ND	10	11.0	ug/L	110	(70-130)	20	1.8
LCS1	Trichlorofluoromethane		5.0	4.48	ug/L	90	(70-130)		
LCS2	Trichlorofluoromethane		5.0	4.81	ug/L	96	(70-130)	20	7.1
MBLK	Trichlorofluoromethane			<0.25	ug/L				

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

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RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)



# MWH

## LABORATORIES

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Laboratory  
QC Report: 364587

City of Phoenix  
(continued)

QC Type	Analyte	Native	Spiked	Recovered	Units	Yield (%)	Limits (%)	RPDLimit (%)	RPD%
MRL_CHK	Trichlorofluoromethane		0.5	0.500	ug/L	100	(50-150)		
MS_201105120414	Trichlorofluoromethane	ND	10	10.5	ug/L	105	(70-130)		
MS_201105170477	Trichlorofluoromethane	ND	10	10.8	ug/L	108	(70-130)		
MSD_201105120414	Trichlorofluoromethane	ND	10	11.2	ug/L	112	(70-130)	20	6.5
MSD_201105170477	Trichlorofluoromethane	ND	10	11.6	ug/L	116	(70-130)	20	7.1
LCS1	Vinyl Acetate		25	22.9	ug/L	92	(70-130)		
LCS2	Vinyl Acetate		25	23.5	ug/L	94	(70-130)	20	2.1
MBLK	Vinyl Acetate			<5.0	ug/L				
MRL_CHK	Vinyl Acetate		2.5	2.07	ug/L	83	(50-150)		
MS_201105120414	Vinyl Acetate	ND	50	37.2	ug/L	74	(70-130)		
MS_201105170477	Vinyl Acetate	ND	50	43.7	ug/L	88	(70-130)		
MSD_201105120414	Vinyl Acetate	ND	50	41.8	ug/L	84	(70-130)	20	12
MSD_201105170477	Vinyl Acetate	ND	50	46.4	ug/L	93	(70-130)	20	6.0
LCS1	Vinyl chloride (VC)		5.0	5.01	ug/L	100	(70-130)		
LCS2	Vinyl chloride (VC)		5.0	5.01	ug/L	100	(70-130)	20	0.0
MBLK	Vinyl chloride (VC)			<0.15	ug/L				
MRL_CHK	Vinyl chloride (VC)		0.5	0.560	ug/L	112	(50-150)		
MS_201105120414	Vinyl chloride (VC)	ND	10	11.0	ug/L	110	(70-130)		
MS_201105170477	Vinyl chloride (VC)	ND	10	11.5	ug/L	115	(70-130)		
MSD_201105120414	Vinyl chloride (VC)	ND	10	11.9	ug/L	119	(70-130)	20	7.9
MSD_201105170477	Vinyl chloride (VC)	ND	10	11.7	ug/L	117	(70-130)	20	1.7

Spike recovery is already corrected for native results.

Spikes which exceed Limits and Method Blanks with positive results are highlighted by Underlining.

Criteria for MS and Dup are advisory only, batch control is based on LCS. Criteria for duplicates are advisory only, unless otherwise specified in the method.

(S) Indicates surrogate compound.

(I) Indicates internal standard compound.

56/56

RPD not calculated for LCS2 when different a concentration than LCS1 is used

RPD not calculated for Duplicates when the result is not five times the MRL (Minimum Reporting Level)